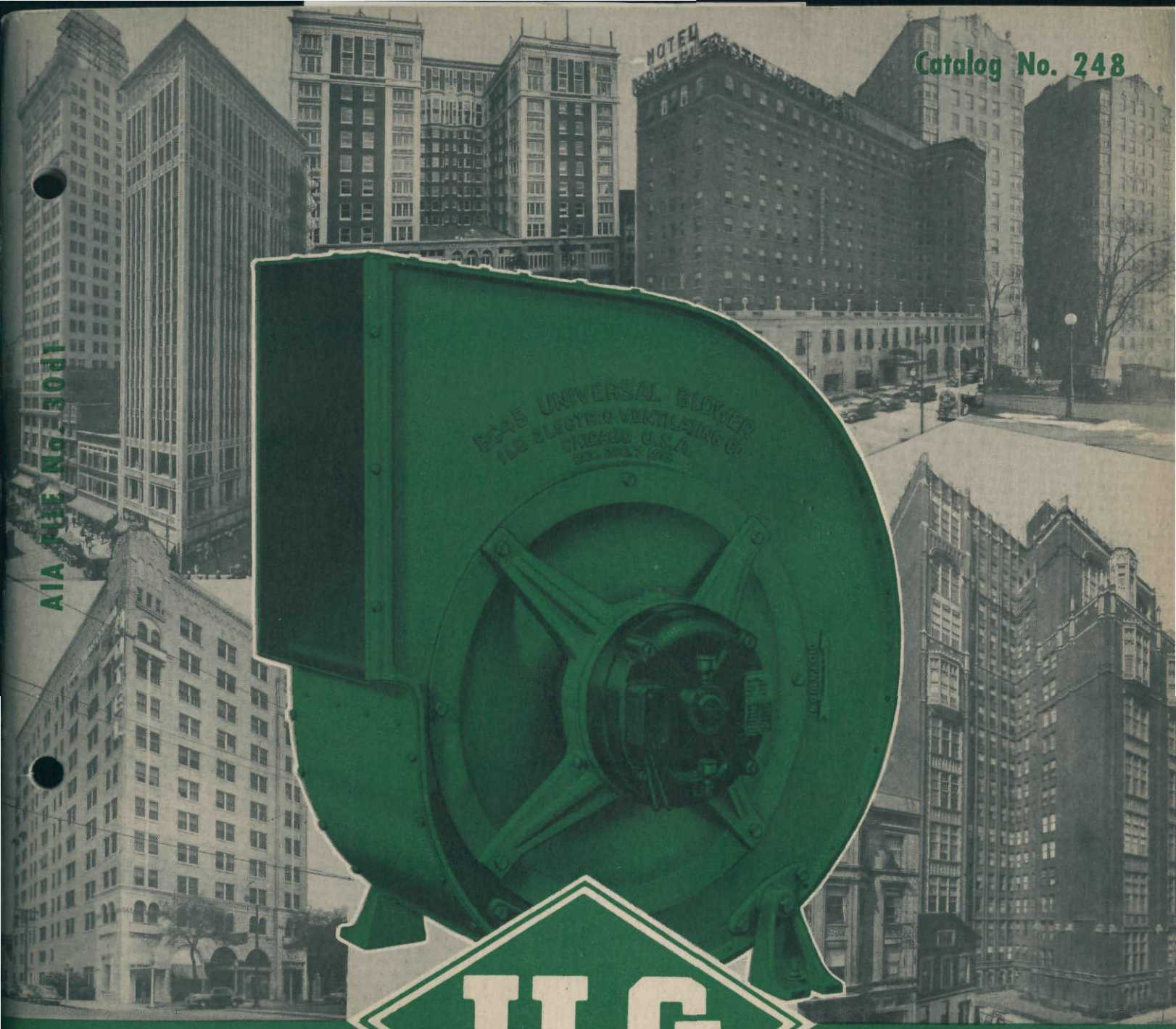
Catalog No. 248

AIA File No. 30d1



ILG

CENTRIFUGAL FANS

Engineering Data

FOR ARCHITECTS AND ENGINEERS

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S. D. STEWART

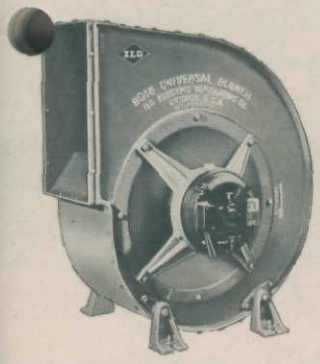
ILG ELECTRIC VENTILATING CO.
MANUFACTURERS
FANS, BLOWERS & UNIT HEATERS
PHONES: RI 6-3260 - 4660

PHILADELPHIA OFFICE
1432 COMMERCIAL TRUST BLDG.
ZONE 2

227
Haverford Ave,
Narberth, Pa.

DIRECT-CONNECTED TYPES

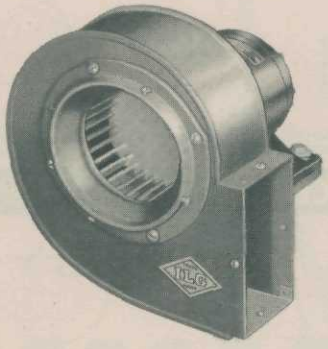
Type "BC"—Pages 10-15



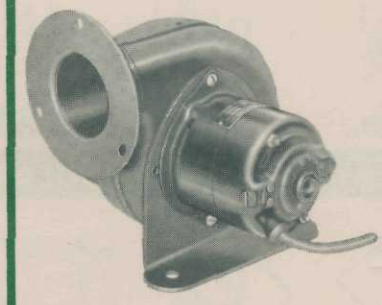
ges 22-25

Type "P" (Volume)—Pages 26, 27

Type "B" (Volume)—Pages 28-30

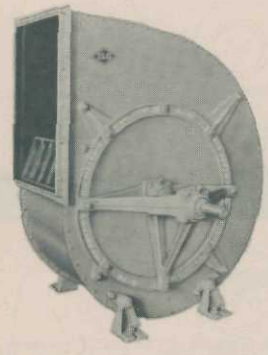


Type "6S" (Utility)—Pages 31, 32

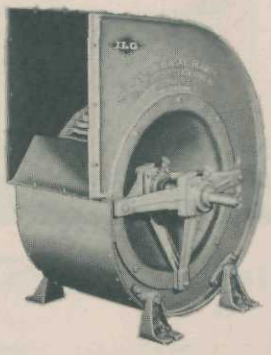


BELTED TYPES

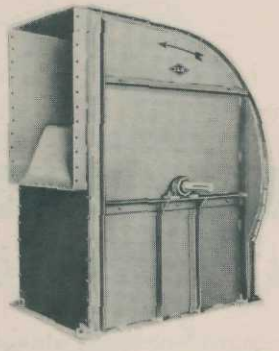
Type "BC"—Pages 38-54



Type "BW"—Pages 55-67



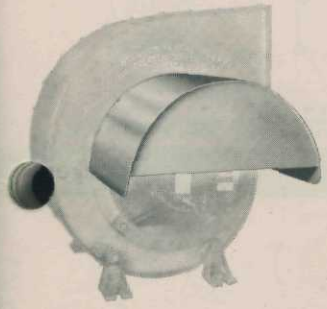
*Large Size Belted Centrifugal Fans



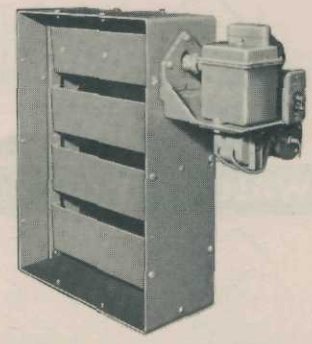
***Information on large size Belted Centrifugal Fans is not contained in this catalog—please write for data.**

ACCESSORIES

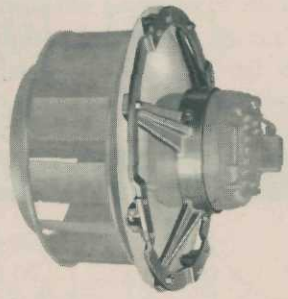
Motor Canopy—Page 33



Variable Air Controller
Pages 35, 36

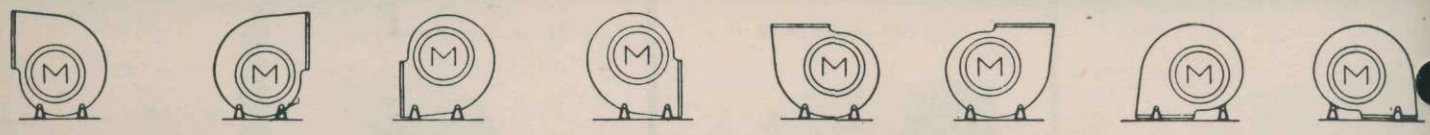


"Floated Drive"—Page 34



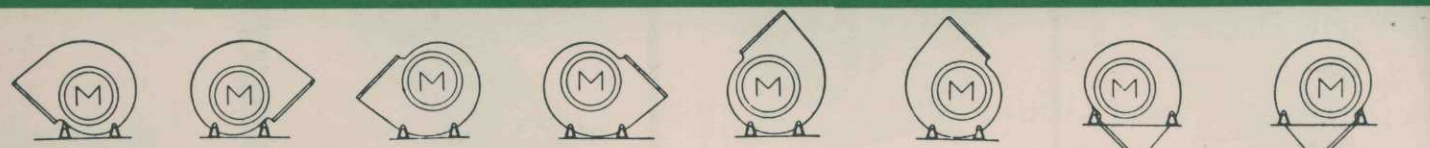
CENTRIFUGAL FAN DISCHARGE ARRANGEMENTS

STANDARD FLOOR TYPE



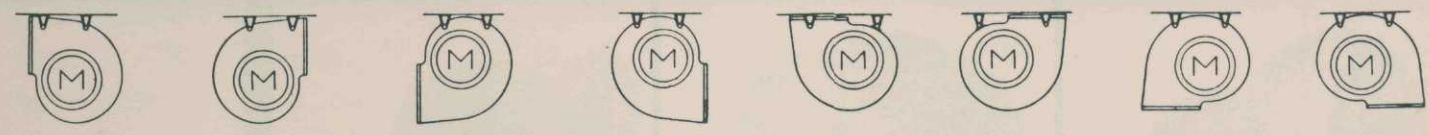
No. 1-F COUNTER-CLOCKWISE TOP HORIZONTAL
No. 2-F CLOCKWISE TOP HORIZONTAL
No. 3-F CLOCKWISE BOTTOM HORIZONTAL
No. 4-F COUNTER-CLOCKWISE BOTTOM HORIZONTAL
No. 5-F CLOCKWISE UP BLAST
No. 6-F COUNTER-CLOCKWISE UP BLAST
No. 7-F COUNTER-CLOCKWISE DOWN BLAST
No. 8-F CLOCKWISE DOWN BLAST

ANGULAR FLOOR TYPE



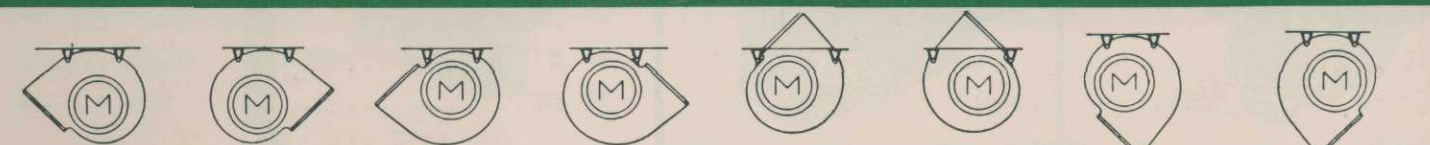
No. 9-F COUNTER-CLOCKWISE TOP ANGULAR DOWN
No. 10-F CLOCKWISE TOP ANGULAR DOWN
No. 11-F CLOCKWISE BOTTOM ANGULAR UP
No. 12-F COUNTER-CLOCKWISE BOTTOM ANGULAR UP
No. 13-F COUNTER-CLOCKWISE TOP ANGULAR UP
No. 14-F CLOCKWISE TOP ANGULAR UP
No. 15-F CLOCKWISE BOTTOM ANGULAR DOWN
No. 16-F COUNTER-CLOCKWISE BOTTOM ANGULAR DOWN

STANDARD CEILING TYPE



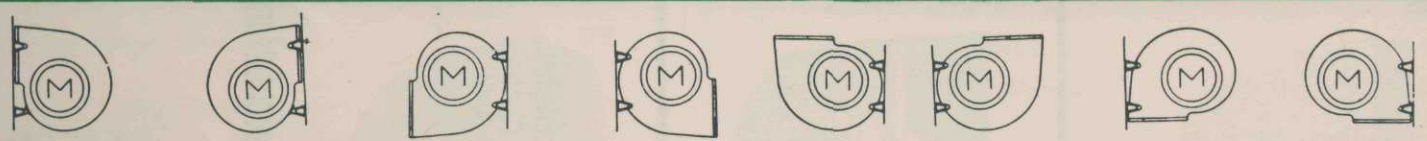
No. 21-C COUNTER-CLOCKWISE TOP HORIZONTAL
No. 22-C CLOCKWISE TOP HORIZONTAL
No. 23-C CLOCKWISE BOTTOM HORIZONTAL
No. 24-C COUNTER-CLOCKWISE BOTTOM HORIZONTAL
No. 25-C CLOCKWISE UP BLAST
No. 26-C COUNTER-CLOCKWISE UP BLAST
No. 27-C COUNTER-CLOCKWISE DOWN BLAST
No. 28-C CLOCKWISE DOWN BLAST

ANGULAR CEILING TYPE



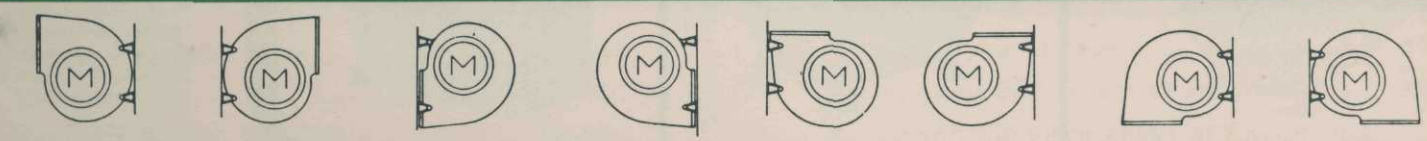
No. 309-C COUNTER-CLOCKWISE TOP ANGULAR DOWN
No. 310-C CLOCKWISE TOP ANGULAR DOWN
No. 311-C CLOCKWISE BOTTOM ANGULAR UP
No. 312-C COUNTER-CLOCKWISE BOTTOM ANGULAR UP
No. 313-C COUNTER-CLOCKWISE TOP ANGULAR UP
No. 314-C CLOCKWISE TOP ANGULAR UP
No. 315-C CLOCKWISE BOTTOM ANGULAR DOWN
No. 316-C COUNTER-CLOCKWISE BOTTOM ANGULAR DOWN

STANDARD WALL TYPE



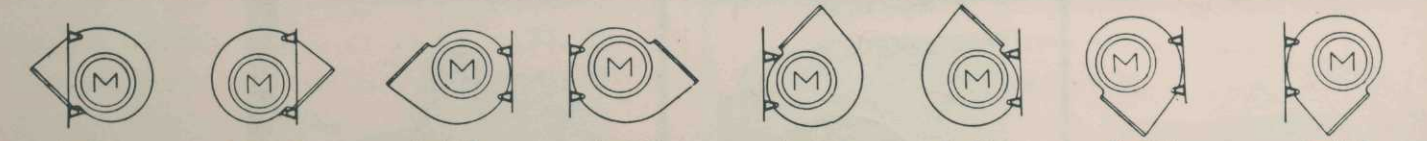
No. 41-W COUNTER-CLOCKWISE TOP HORIZONTAL
No. 42-W CLOCKWISE TOP HORIZONTAL
No. 43-W CLOCKWISE BOTTOM HORIZONTAL
No. 44-W COUNTER-CLOCKWISE BOTTOM HORIZONTAL
No. 45-W CLOCKWISE UP BLAST
No. 46-W COUNTER-CLOCKWISE UP BLAST
No. 47-W COUNTER-CLOCKWISE DOWN BLAST
No. 48-W CLOCKWISE DOWN BLAST

STANDARD WALL TYPE



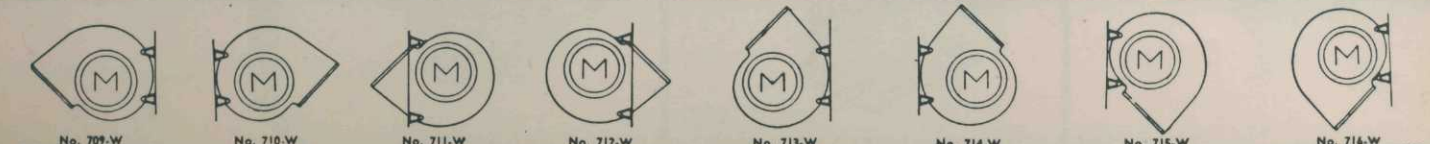
No. 51-W COUNTER-CLOCKWISE TOP HORIZONTAL
No. 52-W CLOCKWISE TOP HORIZONTAL
No. 53-W CLOCKWISE BOTTOM HORIZONTAL
No. 54-W COUNTER-CLOCKWISE BOTTOM HORIZONTAL
No. 55-W CLOCKWISE UP BLAST
No. 56-W COUNTER-CLOCKWISE UP BLAST
No. 57-W COUNTER-CLOCKWISE DOWN BLAST
No. 58-W CLOCKWISE DOWN BLAST

ANGULAR WALL TYPE



No. 609-W COUNTER-CLOCKWISE TOP ANGULAR DOWN
No. 610-W CLOCKWISE TOP ANGULAR DOWN
No. 611-W CLOCKWISE BOTTOM ANGULAR UP
No. 612-W COUNTER-CLOCKWISE BOTTOM ANGULAR UP
No. 613-W COUNTER-CLOCKWISE TOP ANGULAR UP
No. 614-W CLOCKWISE TOP ANGULAR UP
No. 615-W CLOCKWISE BOTTOM ANGULAR DOWN
No. 616-W COUNTER-CLOCKWISE BOTTOM ANGULAR DOWN

ANGULAR WALL TYPE



No. 709-W COUNTER-CLOCKWISE TOP ANGULAR DOWN
No. 710-W CLOCKWISE TOP ANGULAR DOWN
No. 711-W CLOCKWISE BOTTOM ANGULAR UP
No. 712-W COUNTER-CLOCKWISE BOTTOM ANGULAR UP
No. 713-W COUNTER-CLOCKWISE TOP ANGULAR UP
No. 714-W CLOCKWISE TOP ANGULAR UP
No. 715-W CLOCKWISE BOTTOM ANGULAR DOWN
No. 716-W COUNTER-CLOCKWISE BOTTOM ANGULAR DOWN

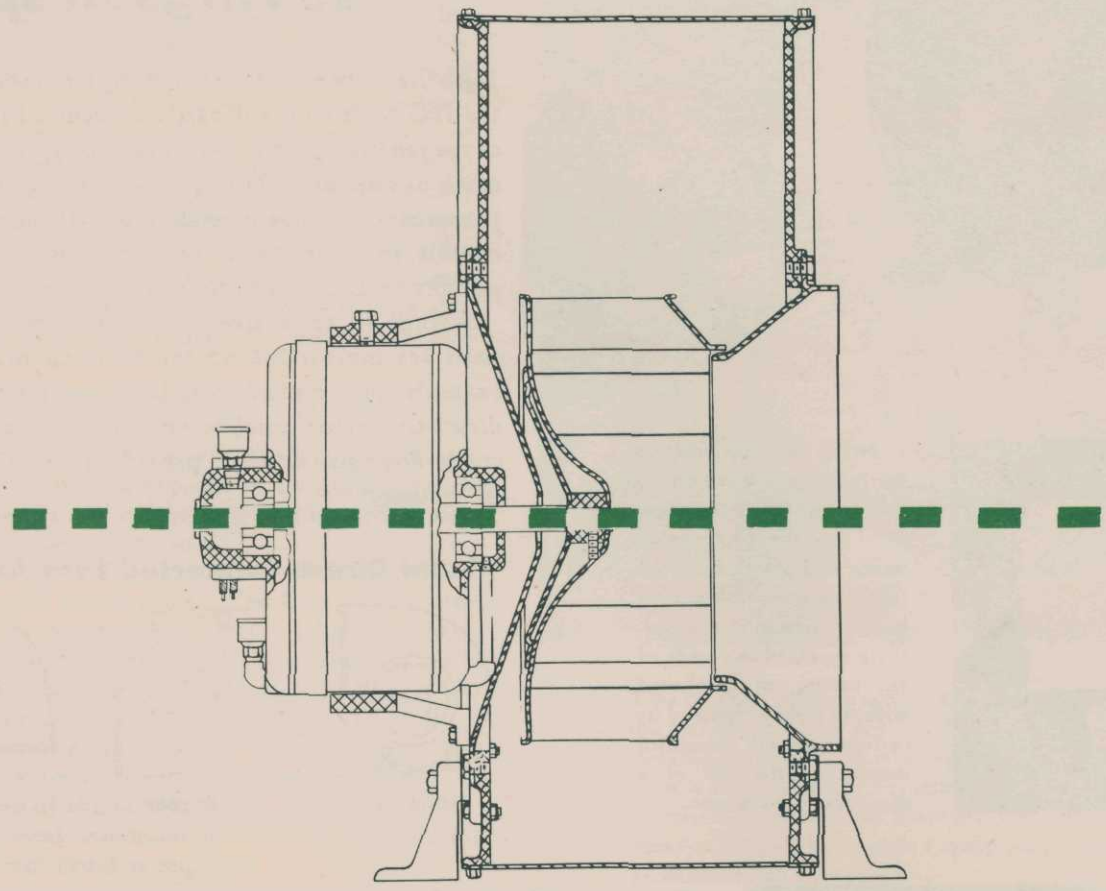
M INDICATES MOTOR SIDE OF FANS

LINE INDICATES SURFACE ON WHICH FAN IS MOUNTED

AS ADOPTED BY THE NATIONAL ASSOCIATION OF FAN MANUFACTURERS

CAUTION—ORDER DISCHARGE WANTED BY NUMBER

Direct-Connected CENTRIFUGAL FANS



Save Space! Save Weight! Save Time! Save Money!

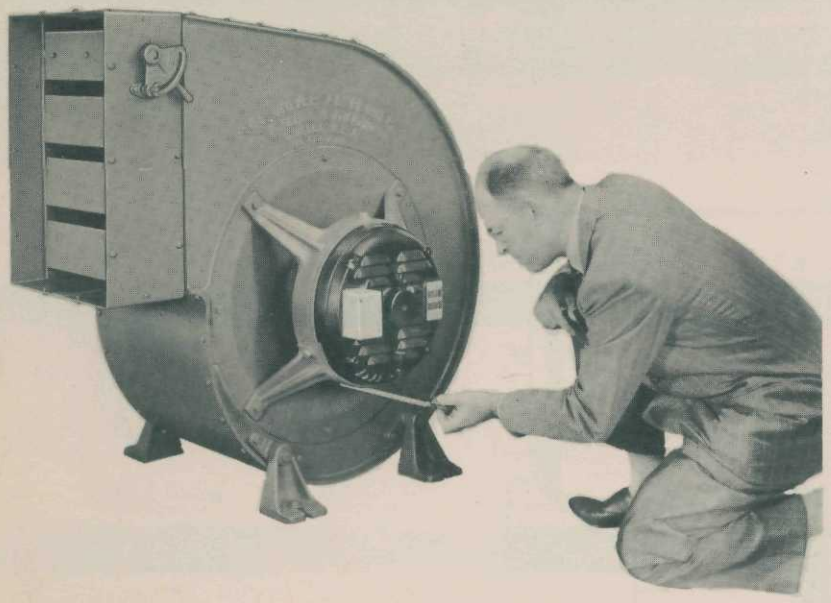
Modern experience of architects, engineers, contractors and owners dictates the specifying of direct-connected apparatus. ILG centrifugal fans with direct-connected motors are available in many sizes because all ILG motors are especially designed for direct drive.

When direct current was in general use, nearly all centrifugal fans were direct-connected. When alternating current became popular, many fan manufacturers were forced to use speed reducers because they could not obtain standard alternating current motors of suitable speed for direct-connection to fan wheel With its own motor department, ILG never had to take this backward step. Today, although ILG manufactures comprehensive lines of belted centrifugal fans, most equipment is designed for direct-drive.

All of the advantages illustrated and described on the following pages accrue from the simplification of driving the fan wheel directly from the motor shaft. Each ILG motor is designed specifically for fan duty, and the complete unit is engineered, built and tested under one roof, and shipped under the ILG "ONE-NAME-PLATE" responsibility.

DESIGNED FROM AERODYNAMIC *AND* ELECTRICAL VIEWPOINTS

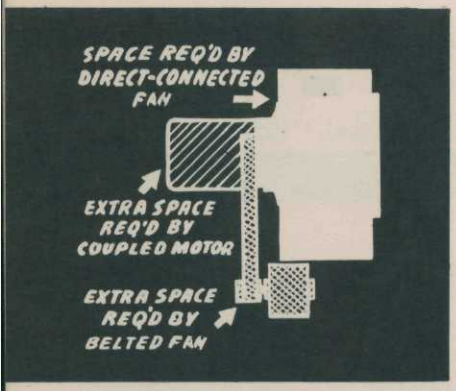
ILG DIRECT-CONNECTION



You can *measure* the savings in *space!*

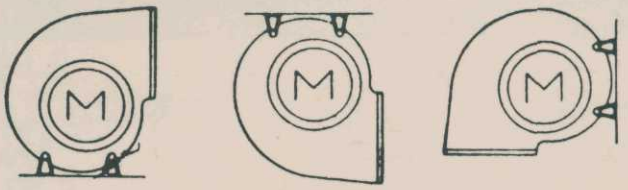
With the fan wheel driven directly from shaft of motor, the ILG-built motor is partially recessed into the side of the fan casing, thus reducing floor space required as much as one-third! This compact arrangement assures permanent alignment, ends the cost, hazards, noise, trouble, and power waste of belts, pulleys, or gears, and permits installation of unit on floor, wall, or ceiling.

Savings in expensive floor space by direct-driven units are measurable on the building blueprint. For example, in a typical installation requiring ten fans, direct-connected units saved over 150 square feet of costly floor space, while providing slightly increased air volume.

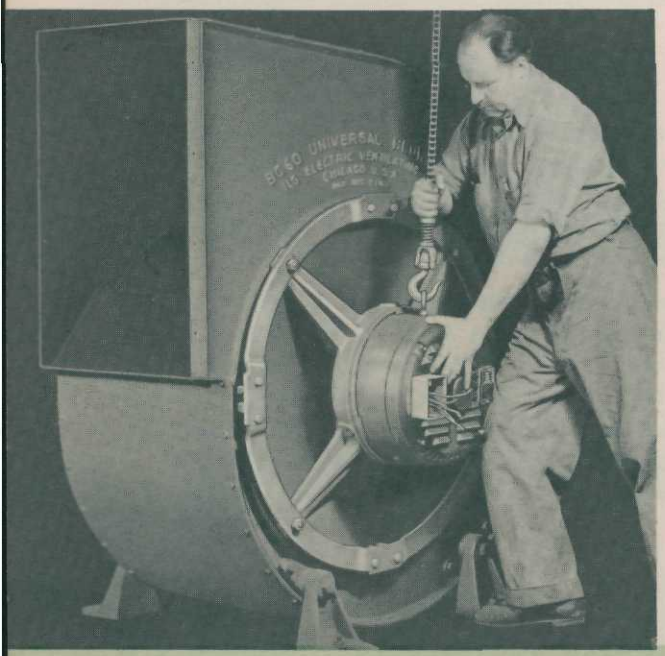


Drawing at left visualizes savings in space which result from ILG's arrangement of direct-connected motor and wheel. Note the small amount of space required when motor is partially recessed into side of fan casing, as compared with the belted type and its independently mounted motor, or the use of a direct coupled motor.

Mount Direct-Connected Fans Anywhere

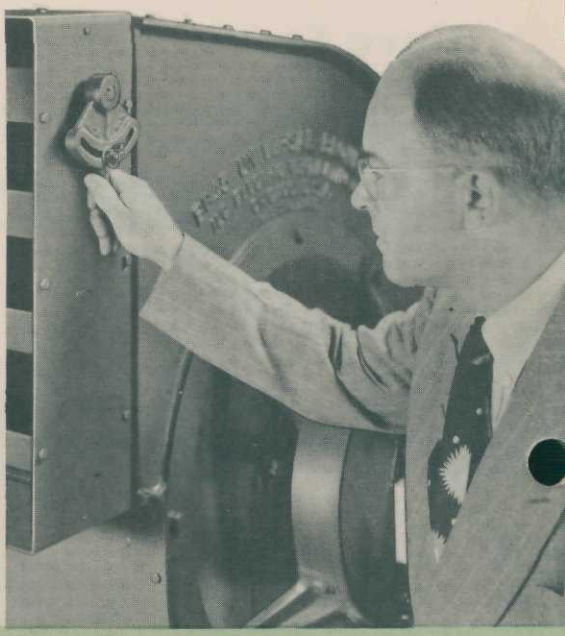


FLOOR CEILING WALL



Reduce Cost of Sound Isolation

(*Left*) The compact arrangement of fan wheel mounted directly on drive shaft of motor permits low-cost sound isolation at point of origin. As described on page 34, "Floated Drive" brackets, which ride in rubber to dampen sound and vibration, can be provided. Simplicity of the design is visualized at left. Compare this with expensive, cumbersome isolation of fan and motor base or bases.



MAKES 5-WAY SAVINGS

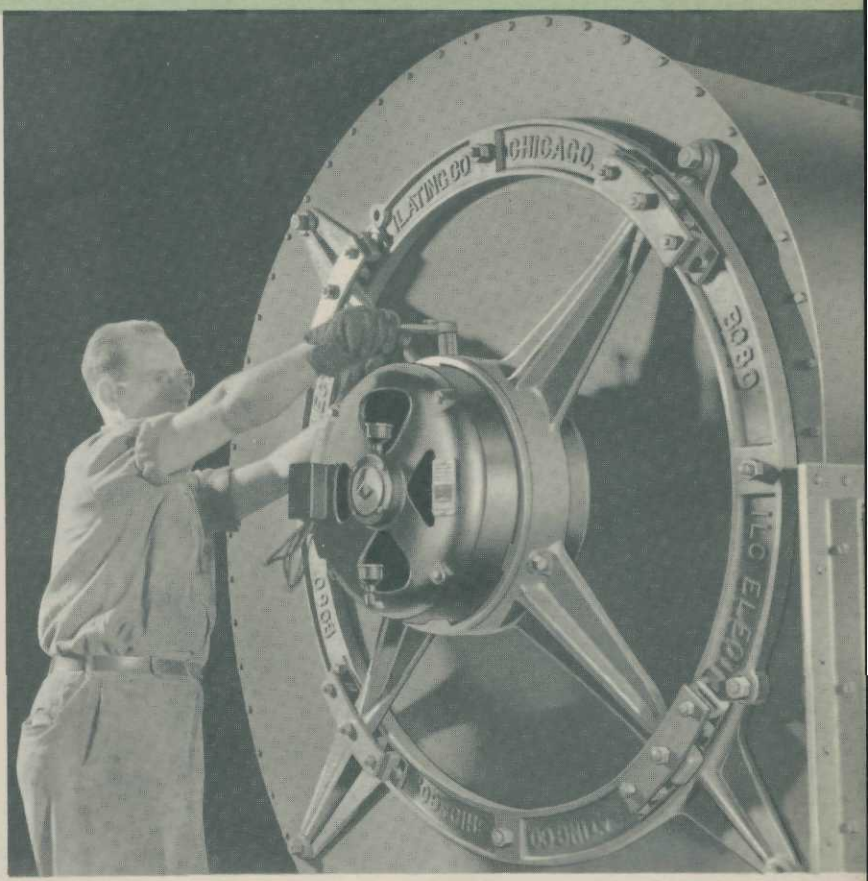
Reduce installation time, cost and trouble

Rapidly rising labor costs have been reduced on thousands of applications by the ease and speed of installing ILG Direct Drive Fans. Since ILG Fans are assembled, tested under actual load conditions and shipped on skids with motor packed separately, installation is a simple matter of bolting four legs to a platform, the floor, wall, or ceiling, mounting of motor and connection to power circuit. The wheel is assembled quickly on the motor shaft (achieving permanent alignment) and the compact drive unit secured in the motor bracket which is bolted to side of casing. Ample evidence is available to prove that an ILG unit *costs less to install than any other type of fan.*

Contrast the low cost on an ILG installation with that of a fan requiring a separate pedestal. With ILG direct-connection, there is no need for the *extra* labor and expense of building a pedestal, mounting the motor, and aligning the motor and fan shafts *on the job.*

Compare the economy of an ILG installation with that of a belted fan. The latter necessitates the *extra* cost and labor of (1) supplying belts, pulleys and belt guards; (2) mounting of motor (possibly building separate motor base); (3) alignment *on the job* of motor and fan pulleys; (4) matching of multiple belts for equitable sharing of load; (5) tightening of belts and (6) mounting of the belt guards.

Additional economies are effected when ceiling or wall mounting is required.



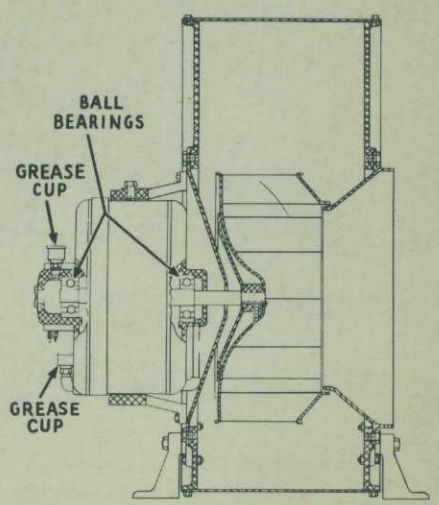
This close-up photograph pictures the compact, simple design of the ILG Direct-Drive Fan which makes possible a quick, low-cost installation. Savings on labor and materials are substantial. Alignment is accurate and permanent. Service call-backs are minimized. Estimates of installation costs are more accurate. There are no items to forget. The result is a completely satisfactory installation, profitable to all concerned.

Save on air volume control

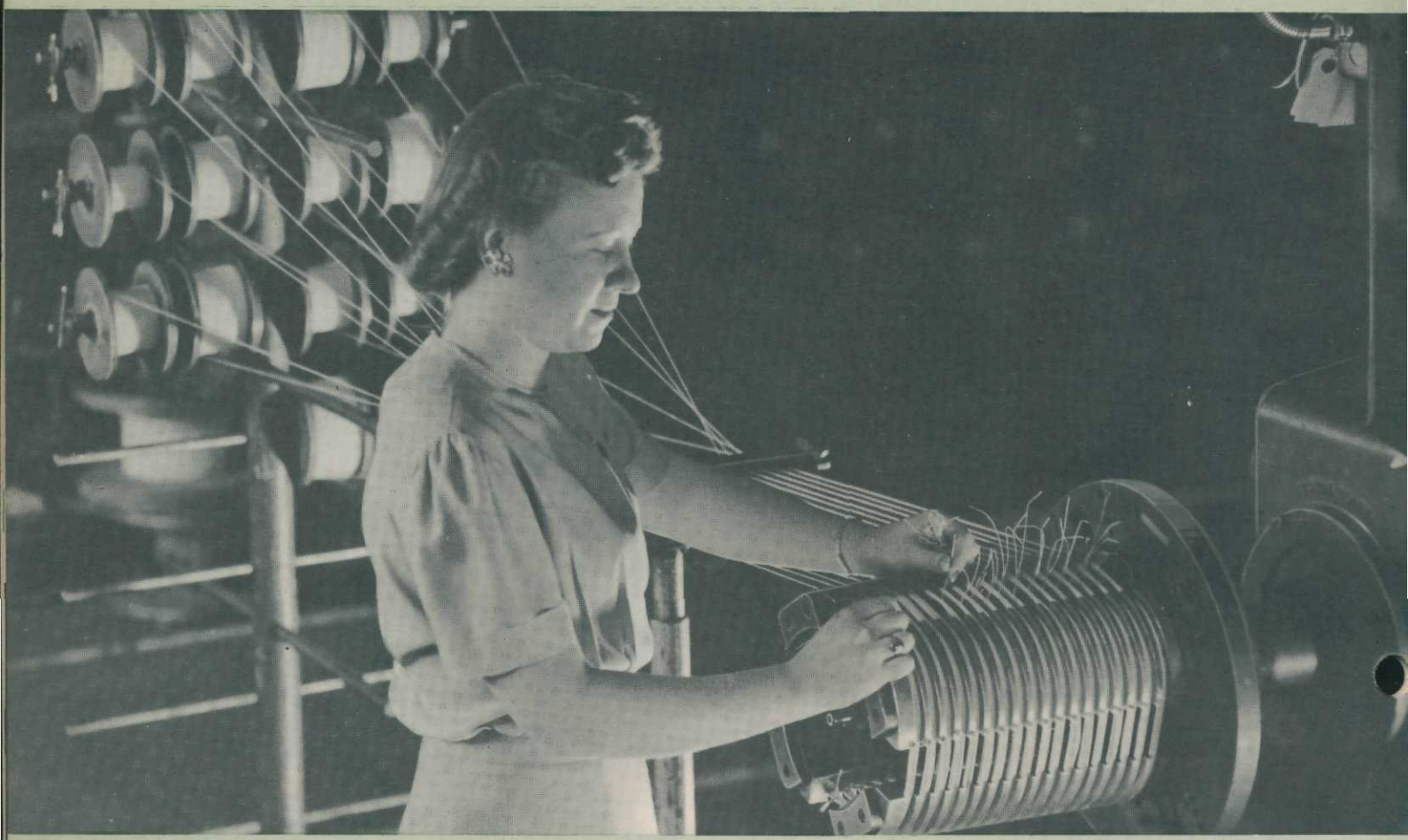
By means of the patented ILG Variable Air Control (illustrated at left) a variation in air delivery for seasonal or special requirements can be obtained quickly and easily when using a direct-connected centrifugal fan with rugged squirrel cage, constant speed motor. Thus, you escape the use of more complicated, costly electrical and mechanical equipment for this purpose, such as a slip ring motor with wound rotor, etc. For complete description, see pages 35, 36.

Save on operating and maintenance cost

Drawing at right shows how the ILG motor and wheel are combined into a single unit rotating on two heavy-duty, grease-packed, anti-friction ball bearings. There are no belts, pulleys, or gears to get out of alignment, cause excessive wear, shorten the life of the equipment and necessitate shut-downs for frequent servicing or replacement. There is no belt slippage to decrease volume, no power-wasting belt-drive friction losses running as high as 15 to 25%. Periodic lubrication of motor bearings is the only attention required by an ILG Fan.



ILG BUILDS ITS OWN MOTORS



Motors of all sizes and types, with special characteristics for centrifugal fan duty, are designed, manufactured and tested in the ILG plant. Here, after eighteen coils are wound simultaneously on the gang winder, operator tapes and wires finished coils.

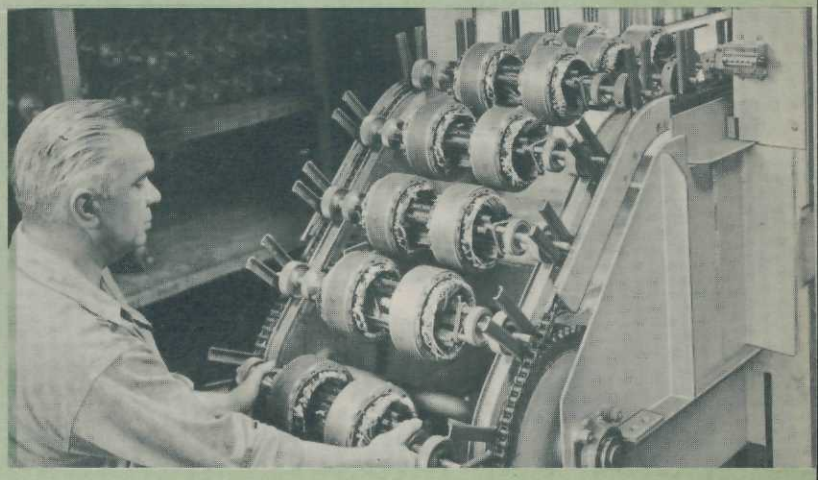
Years of experience accelerate these skilled hands as ILG worker makes internal connections on stator, coil to coil, then brazes and brings out flexible leads.

Heavy-duty, over-sized ball bearings are pressed, not driven, into place to assure the accurate fit which results in long, smooth, trouble-free operation in the field.

FOR CENTRIFUGAL FAN DUTY

With many parts machined to within .0001" tolerance . . . with all moving parts verified for dynamic balance at rated speeds . . . with veteran hand craftsmanship playing an important role in assembly . . . the ILG-built motor is ready to operate at top efficiency for decades.

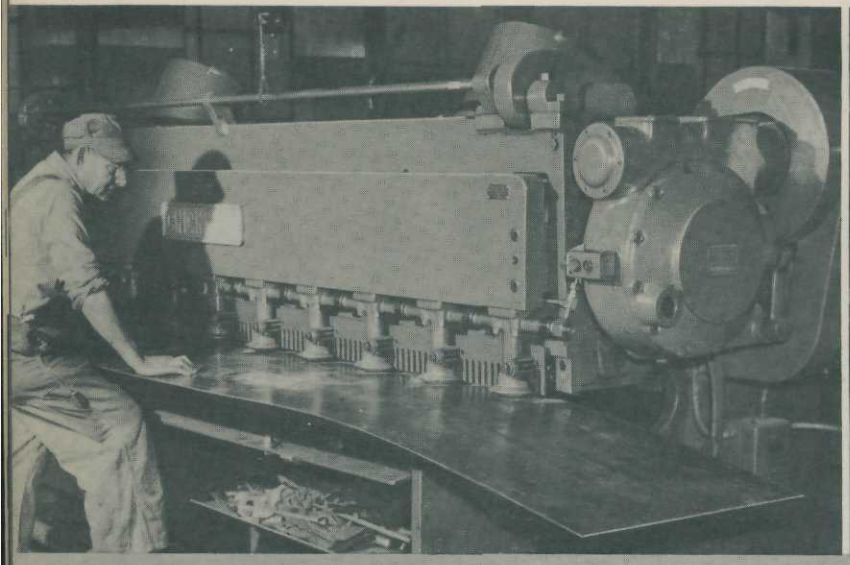
Costly, extremely sensitive Gisholt dynetric balancing machines are used at ILG to check dynamic balance of every moving part at the speed it is designed to operate.



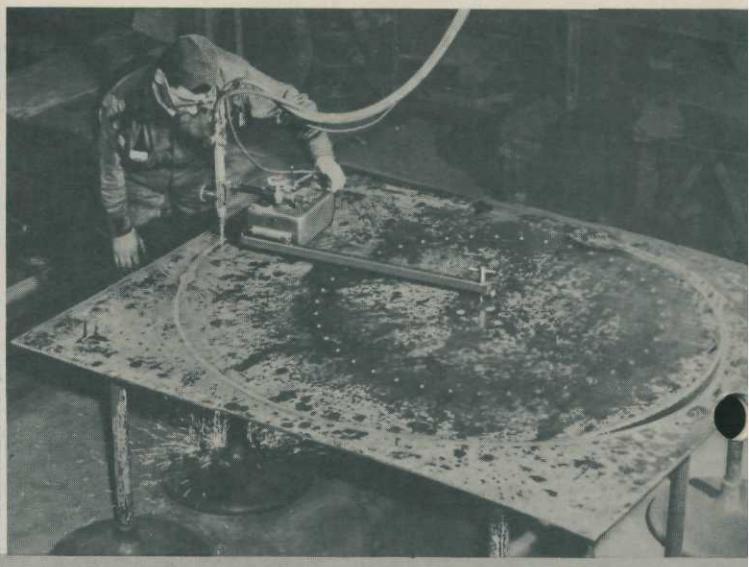
All dipping and baking operations on ILG Motor Windings are under positive automatic control, using the patented Zanderoll process. Uniform impregnation of the windings is assured.

ILG OFFERS FINEST

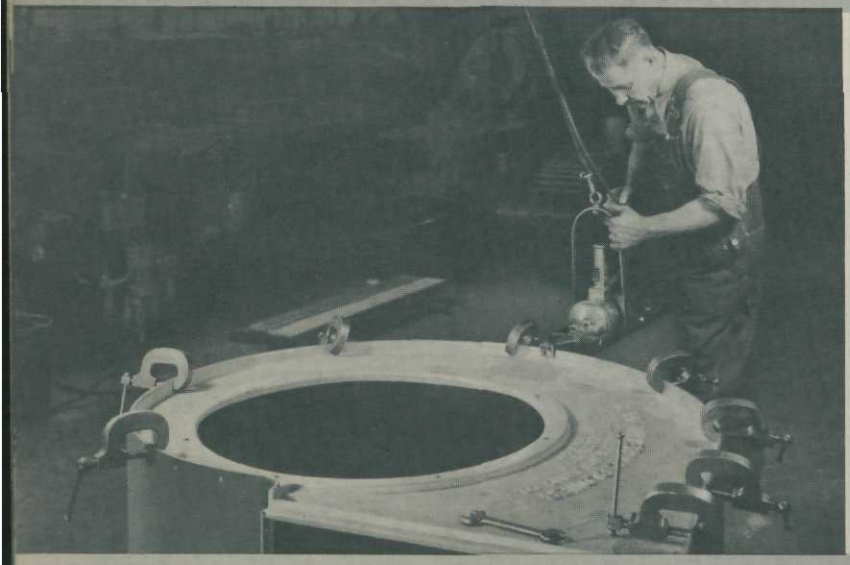
CERTIFIED RATINGS—The ratings of each ILG Centrifugal Fan are certified in accordance with the Standard Test Code adopted jointly by the National Association of Fan Manufacturers and the American Society of Heating and Ventilating Engineers. This gives you complete assurance that the ILG Fans *you* specify or install will deliver their full rated capacity.



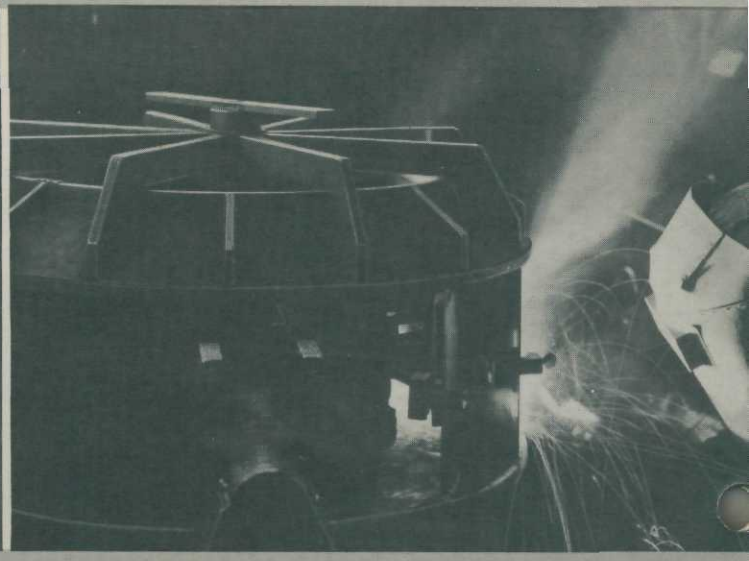
60″ fan scroll is cut from 14-gauge steel by large shear with hydraulic plate holding device. Shear handles stock up to 3/16″ thick, 120″ long, cutting to 1/64″ tolerance.



Like hot knife through butter, flame of acetylene radiagraph eats through 1/4″ stock to cut side of 80″ fan. Radiagraph will cut through steel up to one foot thick.



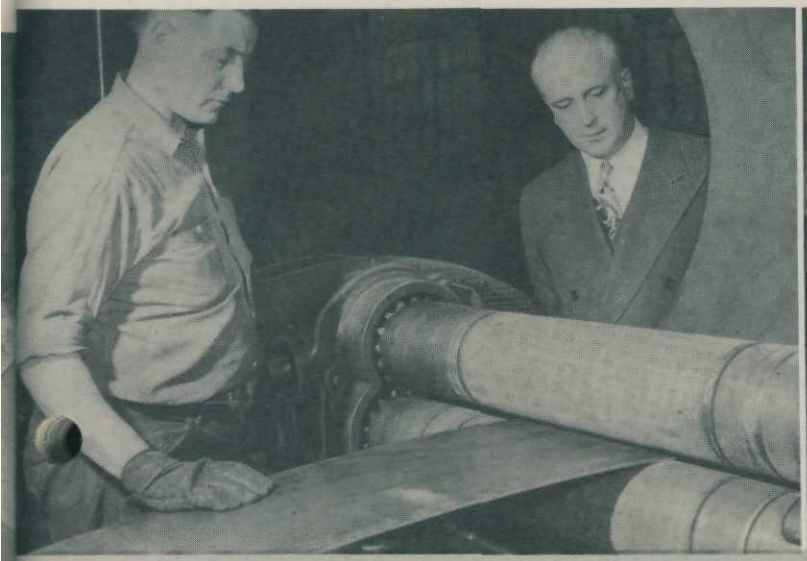
Rolled scroll is formed to sides of fan with heavy clamps. Held securely in position, sides and scroll are then accurately drilled, tapped and bolted together.



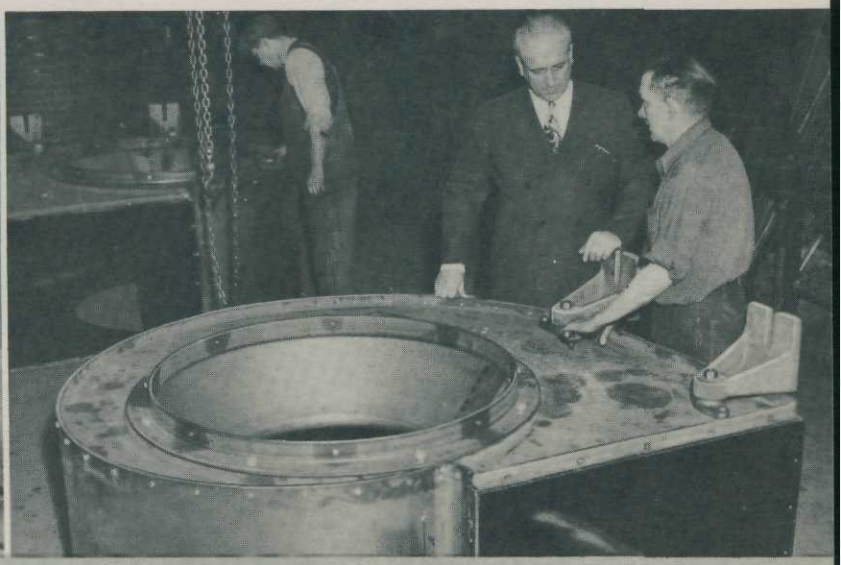
Wheel parts are stamped out, formed into shape, assembled, permanently welded together. After this step, wheels are galvanized, balanced and assembled into fan.

QUALITY CONSTRUCTION

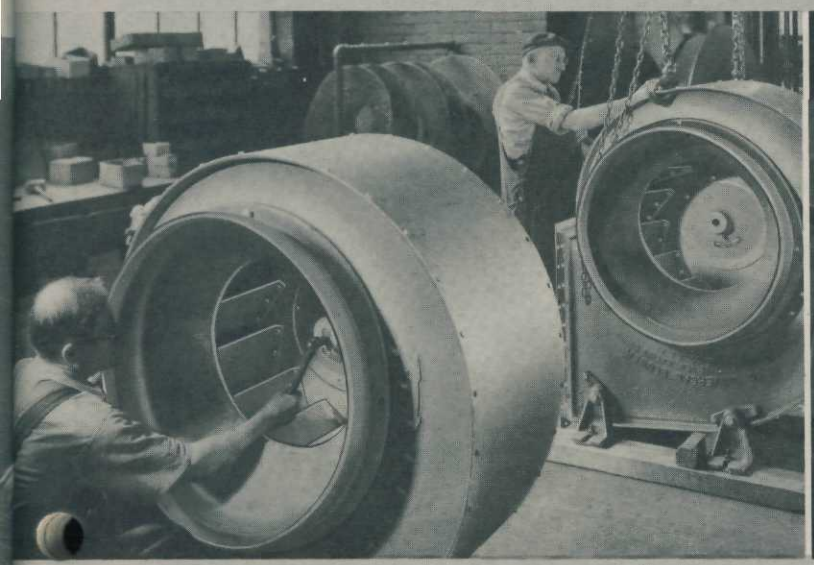
"ONE-NAME-PLATE" RESPONSIBILITY—Since each ILG Fan is designed, engineered, manufactured and tested under one roof, ILG assumes responsibility for the complete unit. ILG products are not "assembled" jobs—there is no divided responsibility between motor and fan manufacturers to cause trouble for the architect, engineer, contractor, or owner. This is a unique, exclusive ILG feature.



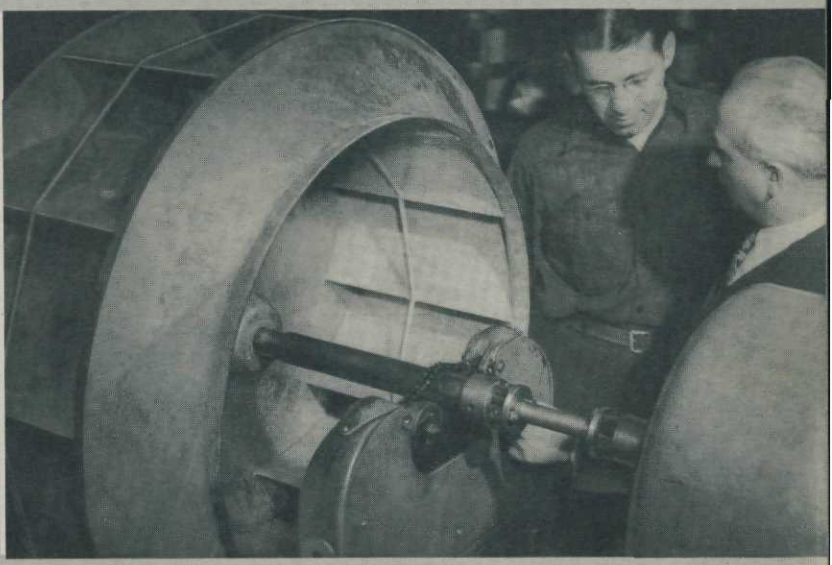
Scroll is formed into approximate final shape between heavy steel triple rollers for ease of assembly to cast sides. Rollers are adjustable to different gages of stock.



Substantial cast legs are applied to the fan housing. By positioning of fan legs, any one of 64 discharge arrangements is possible for floor, wall, or ceiling mounting.



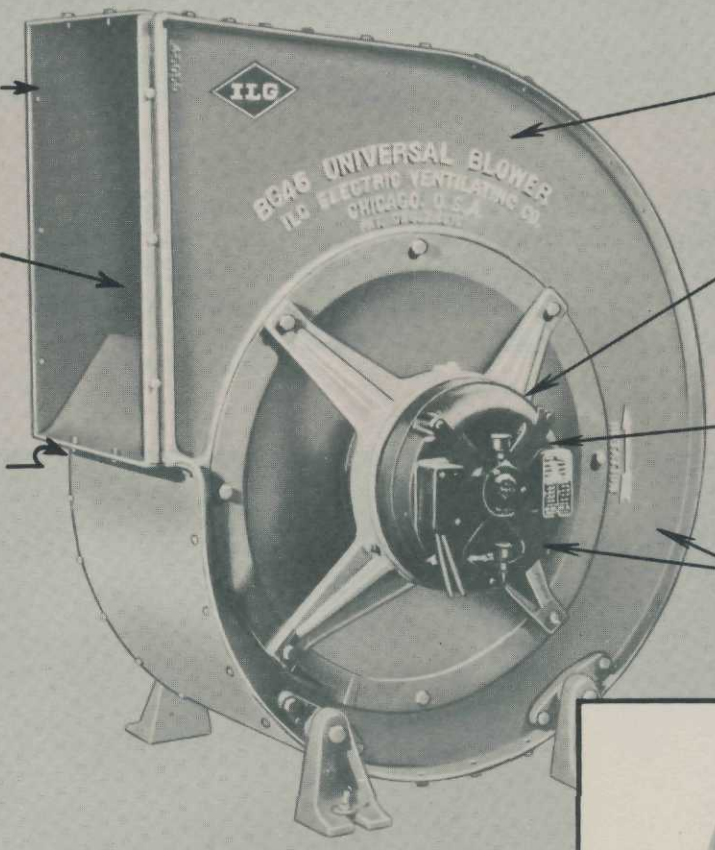
Simplicity of ILG design and unobstructed inlet are illustrated here in assembly of fan housing. Fan is completely self-contained, ready for low-cost installation.



Dynamic balancing of every fan wheel is further evidence of the attention that ILG gives to every detail in designing and building high quality ventilating equipment.

TYPE "BC" CENTRIFUGAL FAN SPECIFICATIONS

DIRECT-CONNECTED — LOAD LIMITING WHEEL



Angle of discharge may be changed at any time by moving legs. Rotation cannot be changed.

Dynamically balanced, load-limiting wheel with backward curved blades.

Unobstructed inlet, free from bearings or bearing supports.

Available with Floated Drive Brackets, also Variable Air Controller —See pages 34-36.

Rugged substantial cast sides (sizes 80 and 90 are of sheet steel).

Direct-Connection of motor and wheel saves space, weight, time and cost. Provides permanent alignment.

Motor custom-built by ILG in accordance with A. I. E. E. standards.

"One-Name-Plate" responsibility covers both Motor and Fan as one complete unit.

USE—Load limiting type with backward curved blades for all ventilating and air conditioning applications. As motor load remains constant over a wide range of air volume and change in static pressure, there is neither need to specify excess motor horsepower, nor chance of motor overload where resistance is less than calculated.

SIZES AND CAPACITIES—10 sizes, with 28 motor speed variations for a complete working range of capacities as shown on page 12.

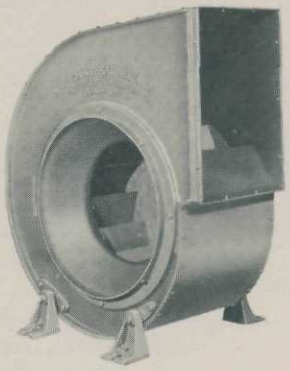
CONSTRUCTION—Cast sides (sizes 80 and 90 have sheet steel sides), steel scroll, cast legs, motor bracket, and inlet connections. Ready, when shipped, for placement, mounting of motor and connection to power circuit.

SPECIAL CONSTRUCTION OR COATINGS—For resistance to chemical action, are available at extra cost. See page 13.

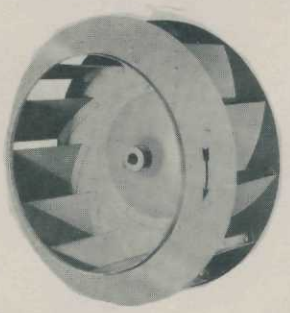
MOTORS—Wound for all commercial electrical power circuits and voltages (see pages 6, 7). Special motors and nonferrous wheels available at extra cost. See page 13.

DIMENSIONS—See pages 14, 15.

WEIGHTS, MOTOR FRAME SIZES—See page 13.



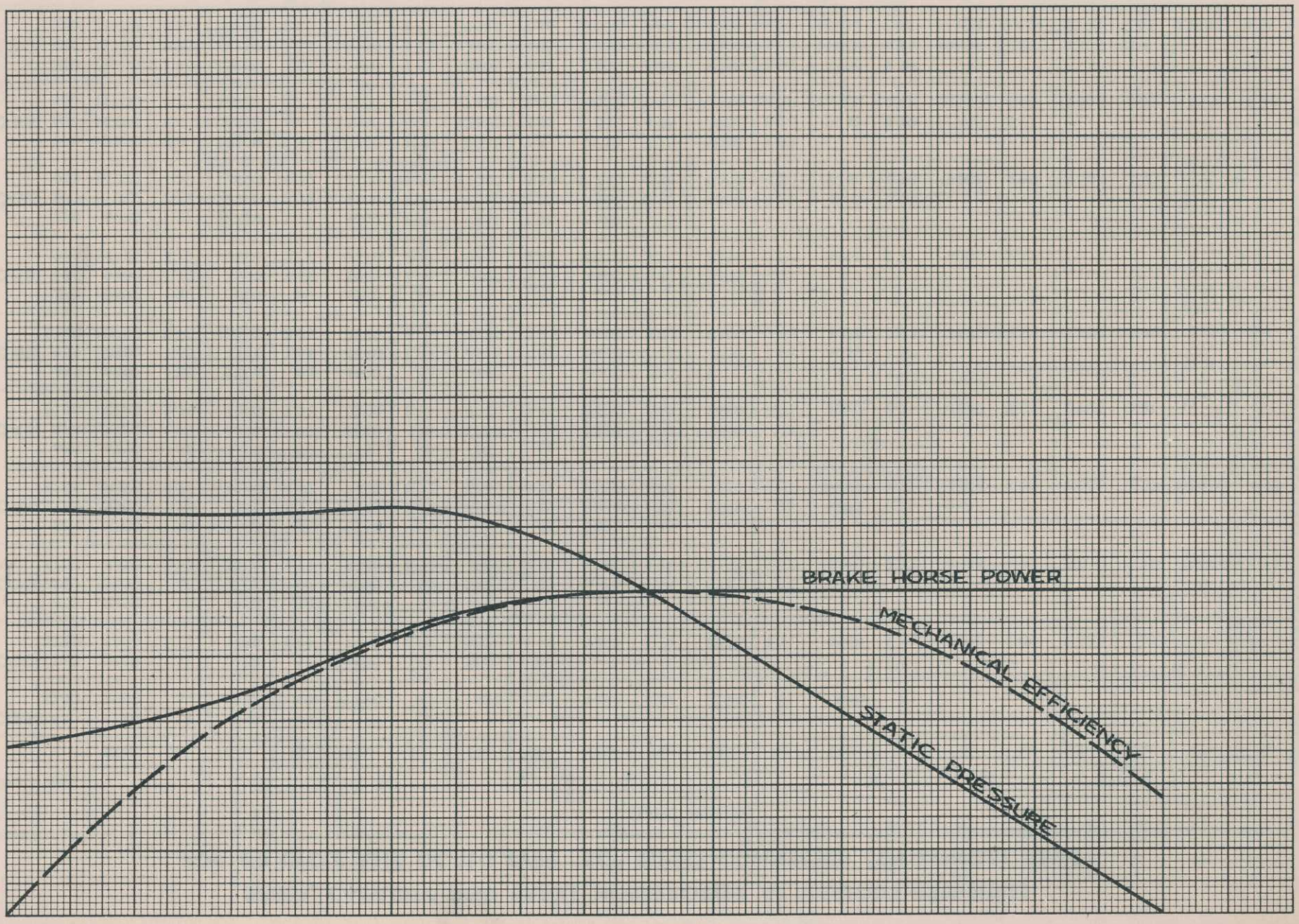
UNOBSTRUCTED INLET—With fan wheel driven directly from the motor shaft, inlet is free from bearings or other obstructions. Air flows smoothly—cannot be polluted with bearing oil.



LOAD-LIMITING WHEEL WITH BACKWARD CURVED BLADES—Made of special heat-treated steel for extreme strength with minimum weight, to lengthen bearing life, and to lighten motor starting load. Die-formed, backward-curved blades are welded to side and back plates. Back plate rises in smooth curve to hub, guiding air to blades of fan with minimum of eddy currents and velocity loss.

FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

CHARACTERISTIC CURVES OF THE ILG TYPE "BC" DIRECT-CONNECTED CENTRIFUGAL FAN



SPEED, CAPACITY AND BRAKE HORSEPOWER AT VARIOUS PRESSURES FOR 60 CYCLE AND DC ILG TYPE "BC" DIRECT-CONNECTED CENTRIFUGAL FANS

Size	Rpm	STATIC PRESSURE																			
		¼"		½"		¾"		1"		1¼"		1½"		1¾"		2"		2½"		3"	
		Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp
BC-25	1140	1170	.13	950	.13	520	.09	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1750	1960	.44	1830	.45	1720	.45	1570	.45	1400	.44	1190	.41	800	.32	.....	.....	.....	.....	.....	.....
BC-30	1140	2200	.31	1920	.31	1620	.31	1240	.29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1750	3600	1.12	3430	1.12	3250	1.12	3070	1.12	2880	1.12	2700	1.11	2500	1.11	2290	1.09	1660	1.01	.....	.....
BC-35	855	2350	.30	1950	.30	1500	.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1140	3400	.60	3100	.60	2800	.60	2475	.60	2150	.60	1750	.58	.....	.....	.....	.....	.....	.....	.....	.....
	1750	5470	2.22	5300	2.22	5100	2.22	4900	2.22	4700	2.22	4500	2.22	4300	2.22	4080	2.22	3650	2.22	3225	2.22
BC-40	855	3750	.55	3280	.55	2800	.55	2250	.55	1300	.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1140	5300	1.25	4950	1.25	4600	1.25	4240	1.25	3850	1.25	3480	1.25	3100	1.25	2625	1.24	.....	.....	.....	.....
	1750	8375	4.52	8160	4.52	7950	4.52	7720	4.52	7500	4.52	7260	4.52	7050	4.52	6800	4.52	6350	4.52	5850	4.52
BC-45	685	4220	.50	3600	.50	2850	.50	1800	.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	855	5570	.98	5050	.98	4500	.98	3950	.98	3400	.98	2500	.92	.....	.....	.....	.....	.....	.....	.....	.....
	1140	7700	2.31	7300	2.31	6900	2.31	6500	2.31	6100	2.31	5660	2.31	5250	2.31	4850	2.31	3900	2.31	.....	.....
BC-50	685	6050	.85	5300	.85	4500	.85	3750	.85	2000	.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	855	7850	1.65	7250	1.65	6660	1.65	6100	1.65	5450	1.65	4850	1.65	4050	1.65	.....	.....	.....	.....	.....	.....
	1140	10780	3.93	10350	3.93	9890	3.93	9450	3.93	9000	3.93	8500	3.93	8070	3.93	7600	3.93	6700	3.93	5650	3.9
BC-55	570	6600	.82	5600	.82	4580	.82	3300	.82	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	685	8300	1.42	7500	1.42	6650	1.42	5800	1.42	4900	1.42	3600	1.32	.....	.....	.....	.....	.....	.....	.....	.....
	855	10700	2.77	10000	2.77	9370	2.77	8700	2.77	8010	2.77	7350	2.77	6690	2.77	6000	2.77	.....	.....	.....	.....
BC-60	570	8900	1.27	7750	1.27	6600	1.27	5500	1.27	3800	1.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	685	11020	2.22	10100	2.22	9200	2.22	8250	2.22	7300	2.22	6400	2.22	5100	2.10	.....	.....	.....	.....	.....	.....
	855	14200	4.30	13500	4.30	12750	4.30	12000	4.30	11250	4.30	10500	4.30	9750	4.30	9000	4.30	7400	4.30	.....	.....
BC-65	570	12550	2.6	11500	2.55	10300	2.50	9000	2.4	7750	2.25	5000	1.90	.....	.....	.....	.....	.....	.....	.....	.....
	685	15400	4.4	14500	4.4	13600	4.4	12600	4.35	11550	4.25	10200	4.15	9250	4.00	7700	3.75	.....	.....	.....	.....
	855	19700	8.75	18950	8.7	18200	8.65	17450	8.6	16650	8.55	15900	8.50	15150	8.40	14350	8.30	12600	8.05	10350	7.60
BC-70	570	14700	2.85	13400	2.85	12200	2.85	10800	2.85	9500	2.85	8150	2.85	5500	2.50	.....	.....	.....	.....	.....	.....
	685	18150	4.85	17100	4.85	16000	4.85	14900	4.85	13800	4.85	12800	4.85	11700	4.85	10600	4.85	6500	4.2	.....	.....
	855	23180	9.55	22250	9.55	21400	9.55	20500	9.55	19650	9.55	18800	9.55	17950	9.55	17100	9.55	15300	9.55	13600	9.55

WEIGHTS AND MOTOR FRAME SIZES
FOR ILG TYPE "BC" DIRECT-CONNECTED CENTRIFUGAL FANS

Size	Rpm	*A.C. 2-3 PHASE		A.C. 1 PHASE		DIRECT CURRENT		Hp	Size
		Motor Frame	Shipping Weight	Motor Frame	Shipping Weight	Motor Frame	Shipping Weight		
BC-25	1140	24	180	24	190	54	190	1/8	**BC-25**
	1750	24	180	24	190	54	190	1/2	
BC-30	1140	24	215	24	225	54	230	1/3	**BC-30**
	1750	24	215	24	225	55	230	1 1/4	
BC-35	855	24	260	24	275	54	260	1/2	**BC-35**
	1140	24	250	24	275	55	260	3/4	
	1750	30	330	.....	.....	58	400	2 1/4	
BC-40	855	24	315	24	330	55	375	1/2	**BC-40**
	1140	28	390	28	405	57	425	1 1/4	
	1750	30	445	.....	.....	60	525	4 1/2	
BC-45	685	28	455	28	470	57	500	7/8	**BC-45**
	855	28	490	28	510	57	525	1 3/8	
	1140	30	515	.....	.....	60	650	2 1/2	
BC-50	685	28	550	28	570	57	600	7/8	**BC-50**
	855	30	600	30	620	60	650	2 1/4	
	1140	32	640	.....	.....	61	725	4	
BC-55	570	30	700	30	720	58	750	1 1/4	**BC-55**
	685	30	800	30	820	58	850	1 1/2	
	855	32	900	.....	.....	60	1050	2 3/4	
BC-60	570	30	800	30	830	60	900	1 1/4	**BC-60**
	685	32	850	.....	.....	61	1000	2 1/4	
	855	34	950	.....	.....	63	1200	4 3/4	
BC-65	570	36	950	.....	.....	63	1250	2 7/8	**BC-65**
	685	36	1025	.....	.....	64	1400	5	
	855	38	1200	.....	.....	66	1650	9 1/4	
BC-70	570	34	1000	.....	.....	61	1350	2 7/8	**BC-70**
	685	36	1250	.....	.....	63	1600	5	
	855	38	1450	.....	.....	66	1800	9 1/2	

**The ILG guarantee on two or three phase motors is void unless the circuit is provided with a motor starter incorporating thermal overload protection of the prope size.*

SPECIAL CONSTRUCTION AVAILABLE AT EXTRA COST
For Type "BC" Direct-Connected Centrifugal Fans

1. Clean-out door.

2. Drain opening.

3. Non-ferrous wheels.

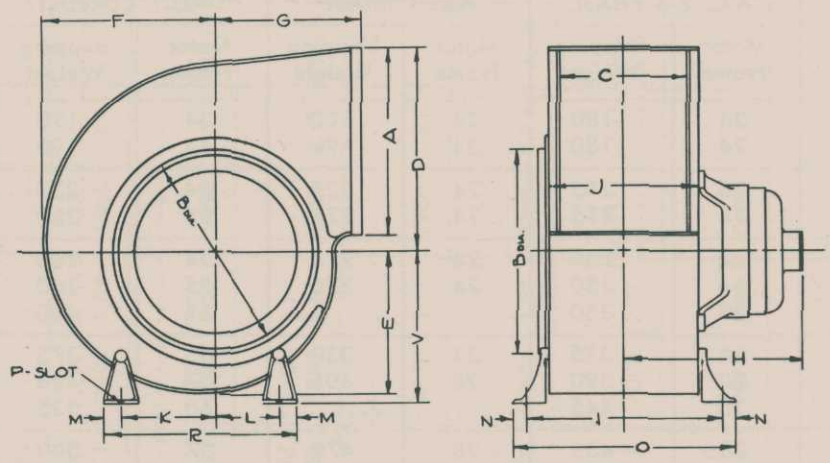
4. Explosion-proof, drip-proof, water-proof, or water-tight motors for most sizes.

5. Special finishes, including Heresite and Lith-cote for withstanding corrosion. Asphaltum base paint can be supplied without extra cost.

6. Higher temperature air handling—standard Type "BC" handles air up to 250° F. Shaft cooler for handling 350° F. air, or shaft cooler and back plate vanes for handling 500° F. air can be obtained at extra cost.

DIMENSIONS—ILG TYPE "BC" CENTRIFUGAL FANS

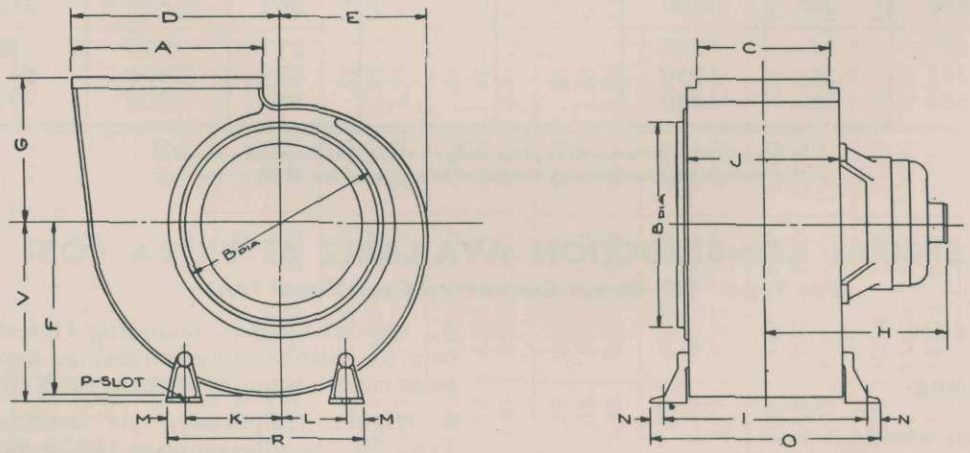
DIRECT-CONNECTED TYPE



Fan is shown for discharge 1F-24C-46W-57W. Motor is on opposite side for discharge 2F-23C-45W-58W.

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅛	10¼	6	3¾	1¼	¾	15⅞	⅝	12¼	10½
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	7¼	4½	1½	1	19⅛	⅝	14¾	12¾
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	8½	5¼	1¾	1⅛	22	⅝	17¼	14¾
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	9¾	6¼	2	1⅜	25¼	¾	20	17
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	11	7	2¼	1⅝	28½	¾	22½	19
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	12½	8	2½	1¾	31¾	⅞	25½	21
55	31	31	21	33	22¾	26¾	22	21½	31	31	23⅝	13¾	8½	2¾	2	35	⅞	27¾	23½
60	34	34	23	36⅛	24⅞	29¼	24	21½	33½	33¾	25⅞	15	9½	3	2¼	38¼	1	30½	25½
65	37	37	25	39¼	27	31¾	26	28½	40	35¾	27⅞	15	10	3	2¼	40¼	1	31	27¾
70	40	40	27	42⅜	29⅛	34¼	28	29⅝	41	38	26⅝	15	10	3½	3	44	1	32	30½



Fan is shown for discharge 6F-27C-44W-51W. Motor is on opposite side for discharge 5F-28C-43W-52W.

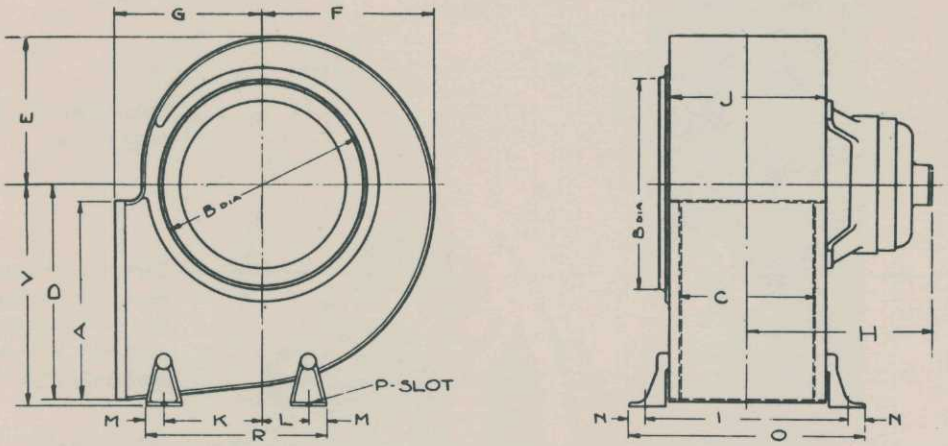
DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14¾	10¼	6½	4¼	1¼	¾	15⅞	⅝	13¼	12¼
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	8	5¼	1½	1	19⅛	⅝	16¼	14¾
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	9	6	1¾	1⅛	22	⅝	18½	17¼
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	10¾	7	2	1⅜	25¼	¾	21¾	20
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	12	8	2¼	1⅝	28½	¾	24½	22¼
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	13½	8¾	2½	1¾	31¾	⅞	27¼	24¾
55	31	31	21	33	22¾	26¾	22	21½	31	31	23⅝	15	9¾	2¾	2	35	⅞	30¼	27½
60	34	34	23	36⅛	24⅞	29¼	24	21½	33½	33¾	25⅞	16¼	10½	3	2¼	38¼	1	32¾	30
65	37	37	25	39¼	27	31¾	26	28½	40	35¾	27⅞	17	10½	3	2¼	40¼	1	33½	32⅜
70	40	40	27	42⅜	29⅛	34¼	28	29⅝	41	38	30	18	12	3½	3	44	1	37	35

See page 2 for discharge arrangement numbers.

DIMENSIONS—ILG TYPE "BC" CENTRIFUGAL FANS

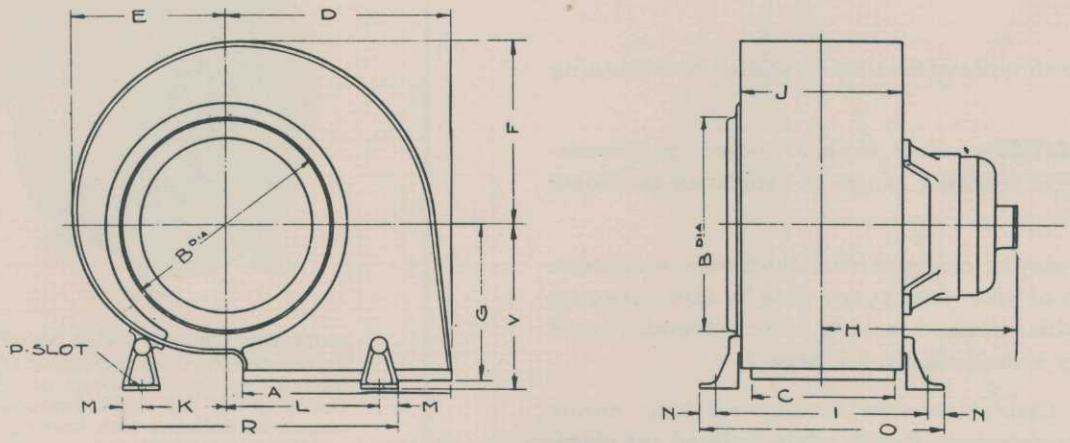
DIRECT-CONNECTED TYPE



Fan is shown for discharge 4F-21C-47W-56W. Motor is on opposite side for discharge 3F-22C-48W-55W.

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅜	10¼	6¾	3¼	1¼	¾	15⅞	⅝	12½	14⅝
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	8¼	4	1½	1	19⅛	⅝	15¼	17¾
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	9½	4½	1¾	1⅛	22	⅝	17½	21
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	11	5	2	1⅜	25¼	¾	20	24¼
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	12½	5	2¼	1⅝	28½	¾	22	27¼
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	14	6	2½	1¾	31¾	⅞	25	30⅞
55	31	31	21	33	22¾	26¾	22	21½	31	31	23⅝	15	6	2¾	2	35	⅞	26½	33¾
60	34	34	23	36⅛	24⅞	29¼	24	21½	33½	33¾	25⅞	17	7	3	2¼	38¼	1	30	36¾
65	37	37	25	39¼	27	31¾	26	28½	40	35¾	27⅞	19	7	3	2¼	40¼	1	32	39¾
70	40	40	27	42⅜	29⅛	34¼	28	29⅝	41	38	26⅝	21	8	3½	3	44	1	36	43½



Fan is shown for discharge 7F-26C-41W-54W. Motor is on opposite side for discharge of 25C-42W-53W.

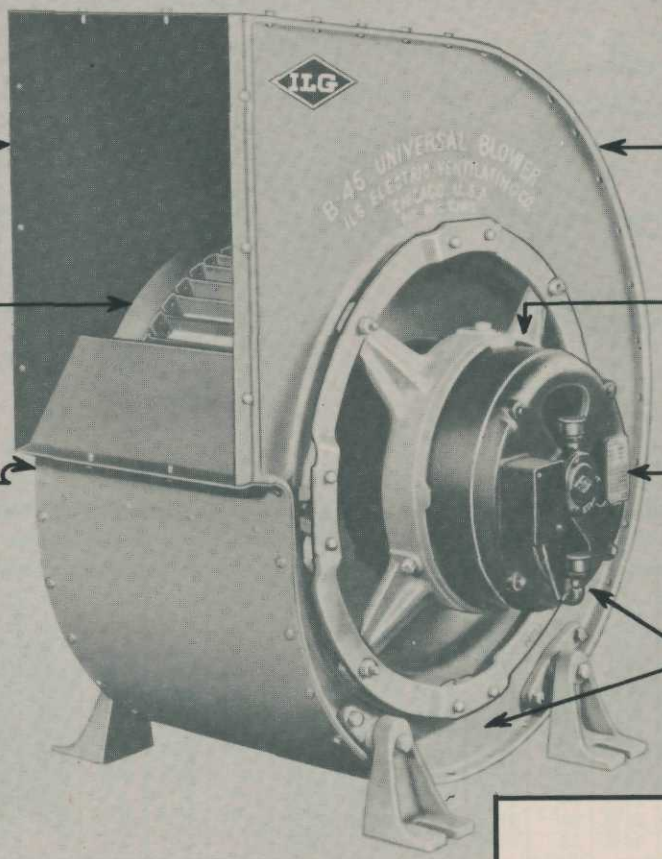
DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅜	10¼	5¼	10	1¼	¾	15⅞	⅝	17¾	10¾
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	7	12	1½	1	19⅛	⅝	22	12½
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	8½	14	1¾	1⅛	22	⅝	26	14½
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	10	16½	2	1⅜	25¼	¾	30½	16½
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	10¾	18½	2¼	1⅝	28½	¾	33¾	18¾
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	12¾	21	2½	1¾	31¾	⅞	38¾	20½
55	31	31	21	33	22¾	26¾	22	21½	31	31	23⅝	14	23	2¾	2	35	⅞	42½	22½
60	34	34	23	36⅛	24⅞	29¼	24	21½	33½	33¾	25⅞	15½	25	3	2¼	38¼	1	46½	24½
65	37	37	25	39¼	27	31¾	26	28½	40	35¾	27⅞	15⅜	31	3	2¼	40¼	1	52⅜	26¾
70	40	40	27	42⅜	29⅛	34¼	28	29⅝	41	38	30	18	37	3½	3	44	1	62	29¼

See page 2 for discharge arrangement numbers.

TYPE "B" CENTRIFUGAL FAN SPECIFICATIONS

DIRECT-CONNECTED — MULTI-BLADE WHEEL



Rotation and angle of discharge can be changed at any time.

Dynamically balanced, multi-blade wheel.

Unobstructed inlet, free from bearings or bearing supports.

Available with Floated Drive Brackets, also Variable Air Controller —See pages 34-36.

Substantial, rugged cast sides.

Direct-Connection of motor and wheel saves space, weight, time and cost. Provides permanent alignment.

Motor custom-built by ILG in accordance with A. I. E. E. standards.

"One-Name-Plate" responsibility covers both Motor and Fan as one complete unit.

USE—Adaptable to all types of ventilating and air conditioning duty.

SIZES AND CAPACITIES—6 sizes, with 17 motor speed variations for a complete working range of capacities as shown on page 18.

FLEXIBILITY—Fan may be changed from clockwise to counter-clockwise rotation or vice versa at any time by interchanging motor assembly with inlet and turning wheel around. For 64 universal discharge arrangements, see page 2.

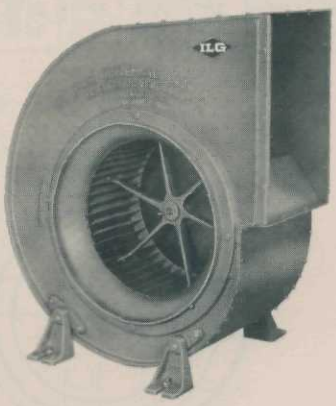
CONSTRUCTION—Cast sides, steel scroll, cast legs, motor bracket, and inlet connections. Ready, when shipped, for placement, mounting of motor, and connection to power circuit.

SPECIAL CONSTRUCTION OR COATINGS—For resistance to chemical action, are available at extra cost—see page 19.

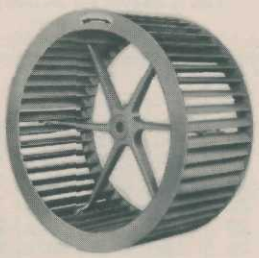
MOTORS—Wound for all commercial electrical power circuits and voltages (see pages 6, 7). Special motors and non-ferrous wheels available at extra cost—see page 19.

DIMENSIONS—See pages 20, 21.

WEIGHTS, MOTOR FRAME SIZES—See page 19.



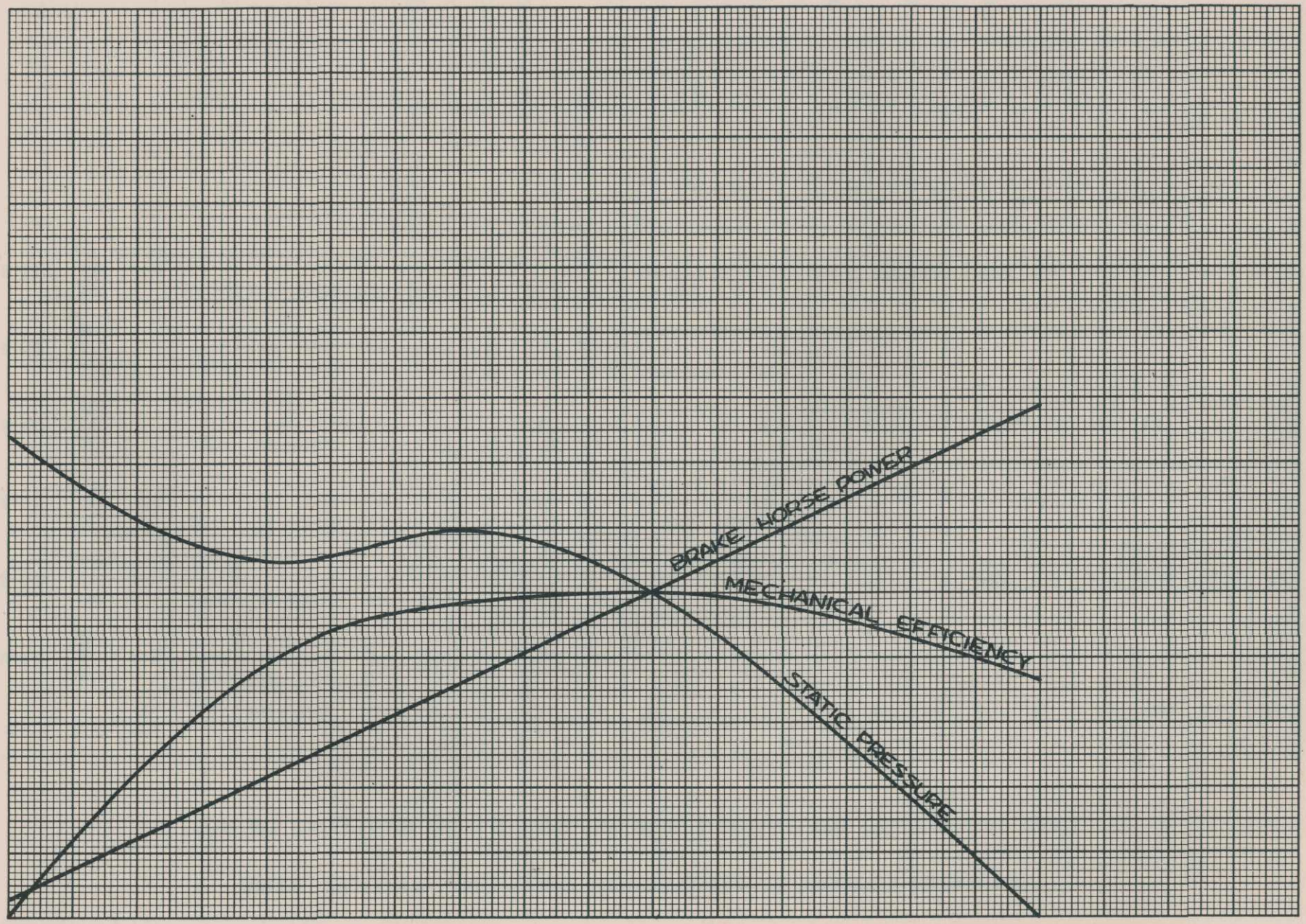
UNOBSTRUCTED INLET—With fan wheel driven directly from the motor shaft, inlet is free from bearings or other obstructions. Air flows smoothly—cannot be polluted with bearing oil.



MULTI-BLADE WHEEL—Rigid, dynamically balanced steel wheel has blades welded to side plates. Semi-steel spider.

FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

CHARACTERISTIC CURVES OF THE ILG TYPE "B" DIRECT-CONNECTED CENTRIFUGAL FAN



SPEED, CAPACITY AND BRAKE HORSEPOWER AT VARIOUS PRESSURES

FOR 60 CYCLE AND DC ILG TYPE "B" DIRECT-CONNECTED CENTRIFUGAL FANS

Size	Rpm	Wh. Dia.	1/8"		1/4"		3/8"		1/2"		5/8"		3/4"		7/8"		1"		1 1/8"		1 1/4"	
			Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp	Cfm	Hp
	685		1750	.29	1580	.26	1400	.23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B-25	855	12¾	2265	.58	2135	.54	2000	.51	1860	.47	1715	.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1140		.....	.....	.....	.....	.....	.....	.....	.....	2700	1.23	2600	1.18	2490	1.13	2390	1.09	2280	1.04	2160	.98
	685		3310	.80	3110	.75	2910	.71	2690	.65	2455	.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B-30	855	15½	.....	.....	.....	.....	.....	.....	.....	.....	3550	1.32	3380	1.26	3200	1.19	3000	1.12	2795	1.04	2500	.93
	1140		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	570		3744	71	3440	.66	3130	.60	2770	.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B-35	685	18¼	4640	1.28	4395	1.20	4140	1.14	3880	1.06	3600	1.0	3285	.91	.....	.....	.....	.....	.....	.....	.....	.....
	855		.....	.....	.....	.....	.....	.....	.....	.....	5090	2.16	4880	2.07	4665	2.00	4440	1.90	4190	1.79	3930	1.68
	570		5890	1.49	5530	1.40	5180	1.32	4800	1.22	4432	1.13	3970	1.02	.....	.....	.....	.....	.....	.....	.....	.....
B-40	685	21	.....	.....	.....	.....	.....	.....	6340	2.33	6030	2.22	5720	2.15	5370	1.98	5000	1.85	4560	1.69	.....	.....
	855		.....	.....	.....	.....	.....	.....	.....	.....	8200	4.65	7920	4.51	7740	4.40	7470	4.25	7200	4.10	6050	3.98
	490		7330	1.72	6875	1.60	6400	1.51	5900	1.40	5070	1.21	4660	1.12	.....	.....	.....	.....	.....	.....	.....	.....
B-45	570	23¾	8720	2.75	8340	2.64	7940	2.52	7530	2.40	7080	2.25	6620	2.12	.....	.....	.....	.....	.....	.....	.....	.....
	685		.....	.....	.....	.....	.....	.....	.....	.....	9300	4.40	8950	4.25	8620	4.09	8250	3.92	7850	3.74	7450	3.55
	490		10420	3.05	9900	2.90	9380	2.75	8850	2.6	8300	2.45	7680	2.26	.....	.....	.....	.....	.....	.....	.....	.....
B-50	570	26½	.....	.....	.....	.....	.....	.....	.....	.....	10450	4.18	10000	4.00	9520	3.83	9000	3.50	8400	3.41	7750	3.15

WEIGHTS AND MOTOR FRAME SIZES
FOR ILG TYPE "B" DIRECT-CONNECTED CENTRIFUGAL FANS

Blower Size	Rpm	*A.C. 2-3 PHASE		A.C. 1 PHASE		DIRECT CURRENT		Hp	Blower Size
		Motor Frame	Shipping Weight	Motor Frame	Shipping Weight	Motor Frame	Shipping Weight		
	685	26	.....	26	.....	55	240	1/3	
B-25	855	26	.....	26	.....	57	360	5/8	B-25
	1140	28	.....	.....	.....	57	360	1 1/4	
	685	28	280	28	300	57	350	7/8	
B-30	855	29	300	.....	.....	57	350	1 3/8	B-30
	1140	32	375	.....	.....	60	475	4	
	570	30	400	30	440	57	440	1 1/4	
B-35	685	30	400	30	440	60	600	1 1/2	B-35
	855	30	400	.....	.....	60	600	2 1/4	
	570	32	500	32	540	60	650	1 1/2	
B-40	685	34	525	.....	.....	61	650	2 1/2	B-40
	855	34	525	.....	.....	63	800	4 3/4	
	490	32	600	32	650	60	850	1 3/4	
B-45	570	34	625	34	675	61	900	2 7/8	B-45
	685	38	700	.....	.....	61	900	5	
B-50	490	36	750	36	800	61	950	3	B-50
	570	36	750	.....	.....	63	1200	4 1/4	

The ILG guarantee on two or three phase motors is void unless the circuit is provided with a motor starter incorporating thermal overload protection of the proper size.

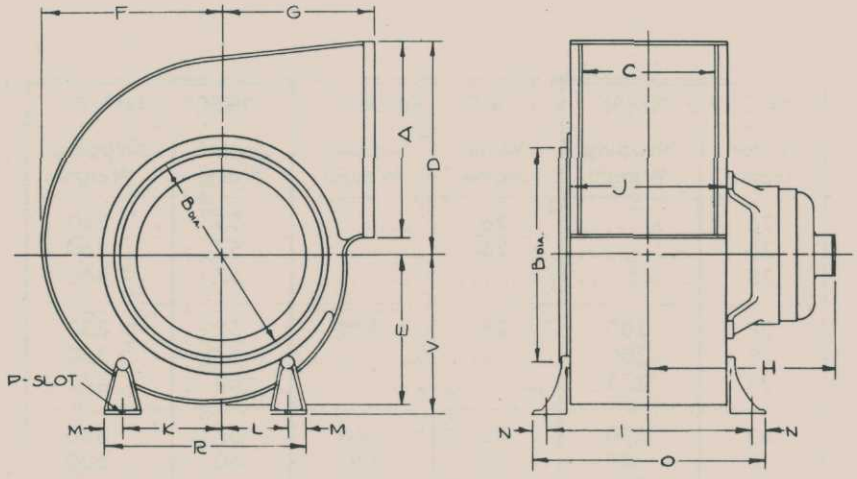
SPECIAL CONSTRUCTION AVAILABLE AT EXTRA COST

For Type "B" Direct-Connected Centrifugal Fans

1. Clean-out door.
2. Drain opening.
3. Non-ferrous wheels.
4. Explosion-proof, drip-proof, water-proof, or water-tight motors for most sizes.
5. Special finishes, including Heresite and Lith-cote for withstanding corrosion. Asphaltum base paint can be supplied without extra cost.
6. Higher temperature air handling—standard Type "B" handles air up to 250° F. Shaft cooler for handling air up to 500° F. can be obtained at extra cost.

DIMENSIONS – ILG TYPE "B" UNIVERSAL CENTRIFUGAL FANS

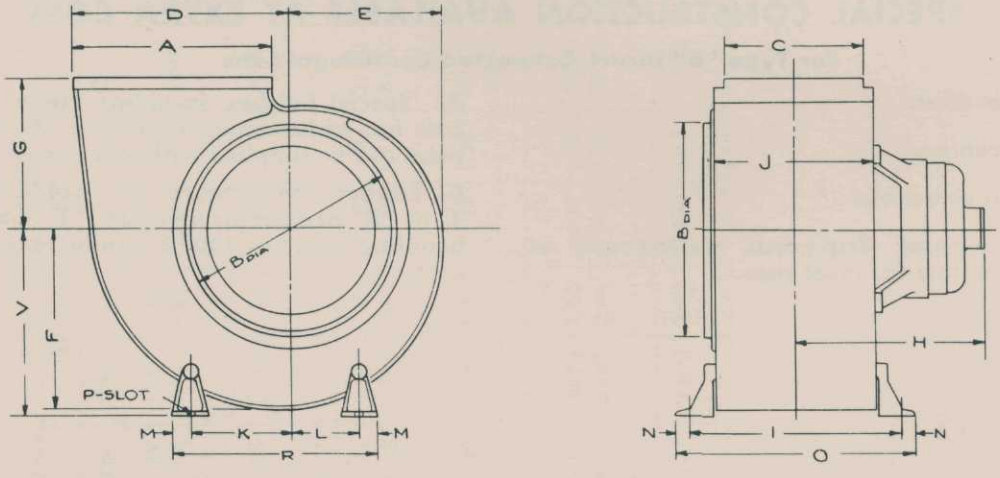
DIRECT-CONNECTED TYPE



Fan is shown for discharge 1F-24C-46W-57W. Motor is on opposite side for discharge 2F-23C-45W-58W.

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅛	10¼	6	3¾	1¼	¾	15⅞	⅝	12¼	10½
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	7¼	4½	1½	1	19⅛	⅝	14¾	12¾
35	19	19	13	20½	14½	16¾	14	17	23½	19¾	14¾	8½	5¼	1¾	1⅛	22	⅝	17¼	14¾
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	9¾	6¼	2	1⅜	25¼	¾	20	17
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	11	7	2¼	1⅝	28½	¾	22½	19
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	12½	8	2½	1¾	31¾	⅞	25½	21



Fan is shown for discharge 6F-27C-44W-51W. Motor is on opposite side for discharge 5F-28C-43W-52W.

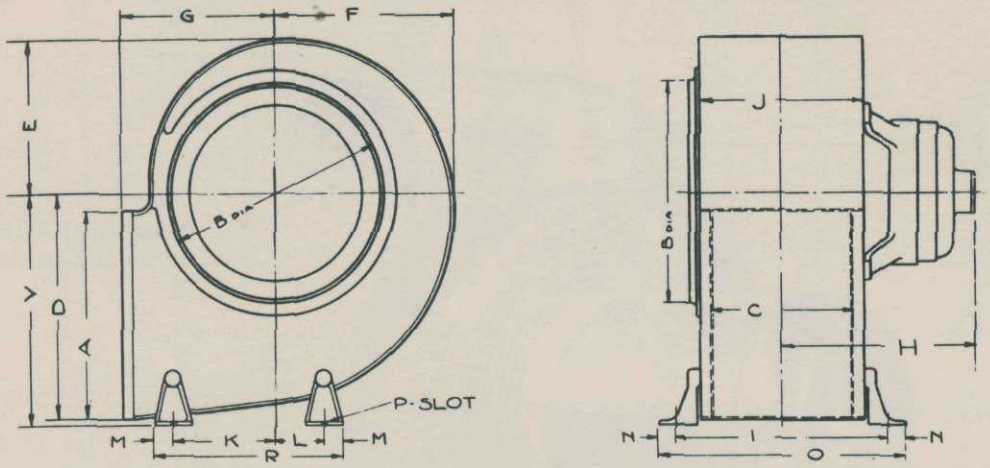
DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14¾	10¼	6½	4¼	1¼	¾	15⅞	⅝	13¼	12¼
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	8	5¼	1½	1	19⅛	⅝	16¼	14¾
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	9	6	1¾	1⅛	22	⅝	18½	17¼
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	10¾	7	2	1⅜	25¼	¾	21¾	20
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	12	8	2¼	1⅝	28½	¾	24½	22¼
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	13½	8¾	2½	1¾	31¾	⅞	27¼	24¾

See page 2 for discharge arrangement numbers.

DIMENSIONS – ILG TYPE "B" UNIVERSAL CENTRIFUGAL FANS

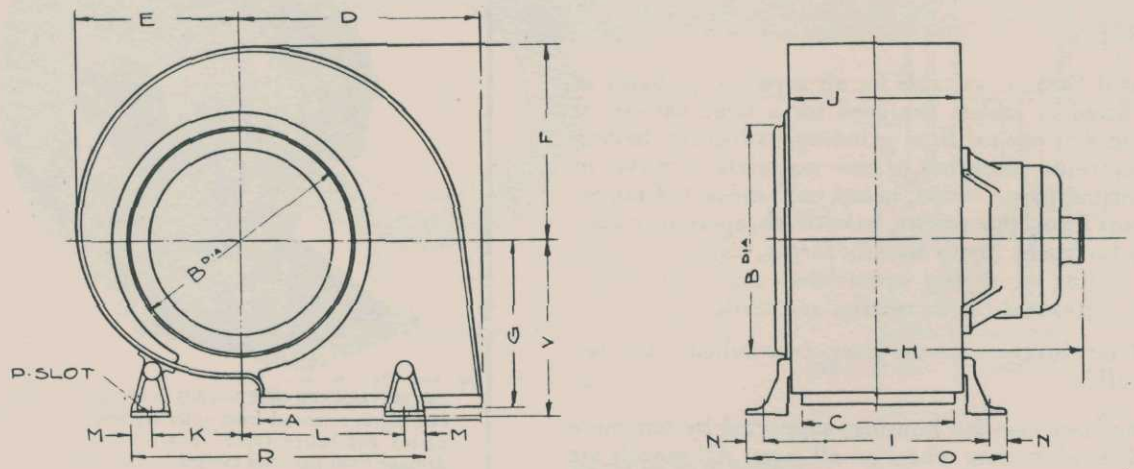
DIRECT-CONNECTED TYPE



Fan is shown for discharge 4F-21C-47W-56W. Motor is on opposite side for discharge 3F-22C-48W-55W.

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅜	10¼	6¾	3¼	1¼	¾	15⅞	⅝	12½	14⅝
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	8¼	4	1½	1	19⅛	⅝	15¼	17¾
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	9½	4½	1¾	1⅛	22	⅝	17½	21
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	11	5	2	1⅜	25¼	¾	20	24¼
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	12½	5	2¼	1⅝	28½	¾	22	27¼
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	14	6	2½	1¾	31¾	⅞	25	30⅞



Fan is shown for discharge 7F-26C-41W-54W. Motor is on opposite side for discharge 8F-25C-42W-53W.

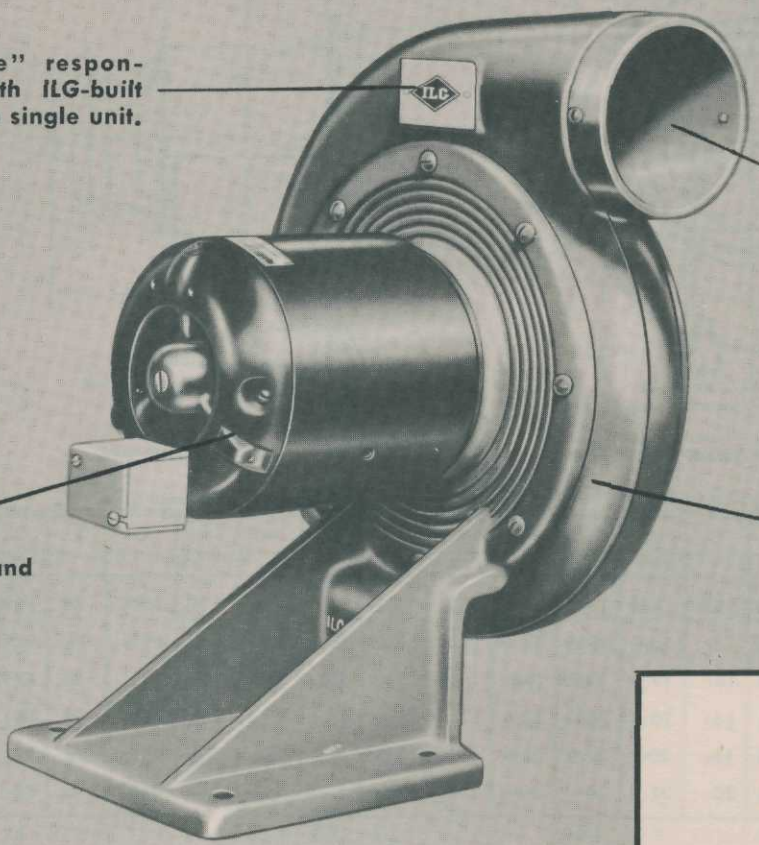
DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	P	R	V
25	13	13	9	14¼	10	11¾	10⅛	14¾	19½	14⅜	10¼	5¼	10	1¼	¾	15⅞	⅝	17¾	10¾
30	16	16	11	17⅜	12⅛	14¼	12	15	19½	17⅛	12½	7	12	1½	1	19⅛	⅝	22	12½
35	19	19	13	20½	14¼	16¾	14	17	23½	19¾	14¾	8½	14	1¾	1⅛	22	⅝	26	14½
40	22	22	15	23⅝	16⅜	19¼	16	20	26⅝	22½	17	10	16½	2	1⅜	25¼	¾	30½	16½
45	25	25	17	26¾	18½	21¾	18	20	27	25¼	19⅛	10¾	18½	2¼	1⅝	28½	¾	33¾	18¾
50	28	28	19	29⅞	20⅝	24¼	20	21	30	28¼	21⅜	12¾	21	2½	1¾	31¾	⅞	38¾	20½

See page 2 for discharge arrangement numbers.

TYPE "PE" CENTRIFUGAL FAN

(PRESSURE EXHAUST)



"One-Name-Plate" responsibility covers both ILG-built motor and fan as a single unit.

Rotatable housings—clockwise or counter-clockwise rotation.

Rigid, sturdy, one-piece fan housing, supported by one-piece side plate and base.

Direct-Connected and belt-driven sizes.

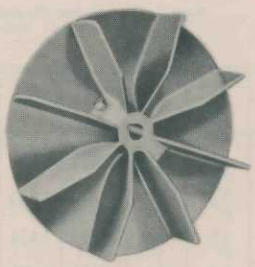
USES: "PE" Centrifugal Fans are suitable for air supply or exhaust at various pressures as listed in tables. Designed for a wide variety of applications, including *dust removal* from grinding, polishing, buffing and sand-blasting operations; *conveyance* of raw materials or waste in processing of wool, cotton, paper, wood, hemp, etc.; *exhaust* of fumes, smoke, steam and vapors from laboratories, bake ovens, spraying rooms and other gas-forming processes; *supply blast* for forges, furnaces, ovens, etc., *air supply* for cooling or drying operations—electronic tubes, high speed machinery, processed foods, textiles and leather.

SIZES AND TYPES: Four direct-connected sizes, two belted sizes. See data on following pages.

CONSTRUCTION: One-piece cast fan housing, supported by one-piece side plate and base. Cast aluminum wheel on all sizes. All wheels are dynamically balanced at rated speed, thus providing smooth operation and long bearing life. Direct-connected models have fan wheel mounted directly onto shaft of ILG ball-bearing motor, thus assuring permanent alignment—reducing wear, increasing efficiency and long life. Belt-driven models are equipped with ball bearings in one-piece cast support for minimum maintenance.

DISCHARGE ARRANGEMENTS: Available in all regular N.A.F.M. discharge arrangements. Discharge can be changed on location by removing side bolts and rotating housing. Wheels are convertible for clockwise or counter-clockwise rotation.

UNOBSTRUCTED INLET—adds to efficiency of unit—bearing is removed from inlet on both direct-connected and belted types, thus is not subjected to damage from particles carried in air stream.



ILGPREX WHEEL—for universal use—dynamically balanced at rated speeds. Suitable for handling air, wool, cotton, and paper fibers, waste material from grinding operations, sawdust, etc.

TYPE "PE" DIRECT-CONNECTED CENTRIFUGAL FANS

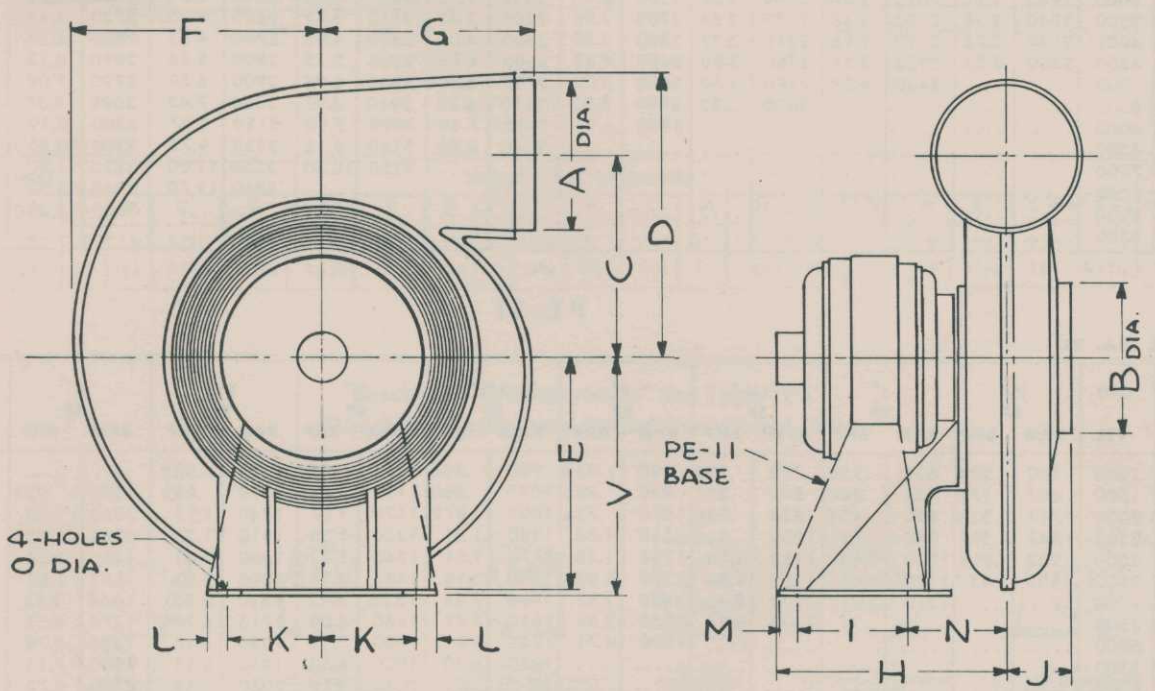
CAPACITY TABLE

SIZE	RPM	MOTOR H.P.	WHEEL DIA.	CATALOG Nos. 1 ph. 60 cy. 110 volts	1 ph. 60 cy. 220 volts	*3 ph. 60 cy. 220-400 v.	D. C. 115 volts	D. C. 230 volts	½" SP CFM	½" SP BHP	1" SP CFM	1" SP BHP	1½" SP CFM	1½" SP BHP	2" SP CFM	2" SP BHP	2½" SP CRM	2½" SP BHP	3" SP CFM	3" SP BHP
PE4	3450	¼	7 9/16"	22410	22411	22412	22413	22414	327	.25	305	.24	283	.23	258	.22	232	.21	202	.19
PE6	3450	1½	11⅛"			22417	22418	22419	1245	2.08	1200	2.01	1160	1.96	1120	1.92	1075	1.86	1035	1.80
PE9	1750	1¾	17 "			22422	22423	22424	2130	2.08	2010	1.99	1890	1.90	1770	1.81	1650	1.74	1510	1.64
PE11	1750	5	21 "			22427	22428	22429	3870	6.10	3730	5.90	3600	5.62	3470	5.35	3350	5.12	3200	4.85

SIZE	RPM	MOTOR H.P.	WHEEL DIA.	3½" SP CFM	3½" SP BHP	4" SP CFM	4" SP BHP	4½" SP CFM	4½" SP BHP	5" SP CFM	5" SP BHP	5½" SP CFM	5½" SP BHP	6" SP CFM	6" SP BHP	7" SP CFM	7" SP BHP	8" SP CFM	8" SP BHP
PE4	3450	¼	7 9/16"	164	.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PE6	3450	1½	11⅛"	995	1.76	950	1.70	900	1.65	850	1.58	795	1.52	735	1.44	600	1.26	.....	.....
PE9	1750	1¾	17 "	1370	1.56	1230	1.48	1070	1.34	870	1.16	.....	.....	.....	.....	.....	.....	.....	.....
PE11	1750	5	21 "	3070	4.60	2920	4.40	2770	4.20	2600	4.10	2450	4.00	2270	3.80	1820	3.10	1000	2.0

*The ILG guarantee on 3 phase motors is void unless the circuit is provided with a motor starter incorporating thermal overload protection of the proper size.

DIMENSIONS AND WEIGHTS



(Dimensions in inches)

SIZE	WHEEL DIA.	A	B	C	D	E	F	G	H ac	H dc	I	J	K	L	M	N	O	V	WEIGHTS NET	WEIGHTS SHIP.
PE4	7 9/16	4	4	5⅜	7 7/16	5 13/16	6 5/16	5⅜	9⅜	.....	4¾	2 7/16	2¾	¾	¾	3 13/32	13/32	7¾	37	55
PE6	11⅛	6	6	8⅛	11 3/16	8¾	9¾	8⅜	13	.....	5	3 1/16	4½	1	1	4½	5/16	11½	154	222
PE9	17	9	9	12⅛	16 11/16	12⅞	14 5/16	12⅛	15½	.....	8	3 15/16	5	1	1	6 5/16	17/32	17¼	250	360
PE11	21	11	11	14⅞	20 13/16	16¾	18½	15 11/16	17 3/16	.....	8¼	4 ¾	7	1½	1⅜	7¼	⅝	21¼	420	600

TYPE "PE" BELTED CENTRIFUGAL FANS

CAPACITY TABLES

PE-9

WHEEL DIA. 17"

CFM	OUT. VEL.	½" SP RPM	½" SP BHP	1" SP RPM	1" SP BHP	1½" SP RPM	1½" SP BHP	2" SP RPM	2" SP BHP	2½" SP RPM	2½" SP BHP	3" SP RPM	3" SP BHP	3½" SP RPM	3½" SP BHP	4" SP RPM	4" SP BHP	4½" SP RPM	4½" SP BHP
422	1000	624	.062	822	.115	966	.168	1100	.222	1230	.282	.....	....	.....	....	.....	....	.....	....
632	1500	730	.106	899	.192	1040	.270	1155	.343	1270	.424	1375	.500	1470	.578	1570	.666	1655	.749
844	2000	855	.203	1005	.295	1135	.398	1250	.498	1350	.604	1450	.705	1540	.815	1620	.915	1700	1.02
1055	2500	995	.337	1125	.442	1240	.564	1350	.630	1450	.825	1540	.950	1620	1.07	1705	1.20	1775	1.32
1265	3000	1140	.525	1260	.651	1370	.789	1460	.923	1550	1.08	1640	1.22	1720	1.38	1800	1.53	1870	1.68
1475	3500	1290	.776	1395	.924	1495	1.08	1580	1.23	1665	1.38	1750	1.57	1830	1.76	1900	1.90	1970	2.10
1690	4000	.....	....	1540	1.28	1630	1.44	1715	1.62	1790	1.80	1870	2.00	1950	2.19	2010	2.36	2080	2.57
1900	4500	.....	....	.....	....	1770	1.90	1850	2.10	1920	2.30	1990	2.50	2060	2.72	2130	2.92	2200	3.12
2110	5000	.....	....	.....	....	.....	....	1985	2.67	2060	2.92	2120	3.12	2180	3.32	2250	3.56	2310	3.80
2320	5500	.....	....	.....	....	.....	....	.....	....	2200	3.58	2260	3.83	2320	4.10	2380	4.32	2440	4.56
2530	6000	.....	....	.....	....	.....	....	.....	....	.....	....	2400	4.69	2460	4.94	2510	5.20	2540	5.50
2740	6500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2600	5.97	2650	6.25	2700	6.52
2950	7000	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2780	7.32	2840	7.71
3160	7500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2980	8.97

CFM	OUT. VEL.	5" SP RPM	5" SP BHP	5½" SP RPM	5½" SP BHP	6" SP RPM	6" SP BHP	7" SP RPM	7" SP BHP	8" SP RPM	8" SP BHP	9" SP RPM	9" SP BHP	10" SP RPM	10" SP BHP	11" SP RPM	11" SP BHP	12" SP RPM	12" SP BHP
844	2000	1720	1.01	1855	1.23	1930	1.34	2070	1.55	2200	1.78	2340	2.01	2460	2.25	2580	2.53	2700	2.81
1055	2500	1850	1.45	1920	1.60	2000	1.72	2130	1.99	2250	2.26	2360	2.51	2490	2.78	2600	3.06	2700	3.32
1265	3000	1940	1.85	2010	2.00	2060	2.09	2200	2.48	2320	2.75	2430	3.09	2540	3.39	2640	3.71	2740	4.02
1475	3500	2040	2.28	2100	2.46	2170	2.64	2280	2.98	2400	3.35	2510	3.72	2620	4.05	2720	4.44	2810	4.82
1690	4000	2140	2.78	2210	2.96	2270	3.17	2380	3.58	2500	4.00	2600	4.35	2700	4.83	2800	5.23	2890	5.67
1900	4500	2260	3.35	2320	3.56	2380	3.80	2480	4.23	2600	4.73	2690	5.15	2800	5.65	2890	6.12	2980	6.53
2110	5000	.....	....	2430	4.28	2490	4.50	2600	5.02	2700	5.50	2800	6.02	2900	6.50	2990	7.09	3080	7.50
2320	5500	.....	....	.....	....	2600	5.33	2700	5.85	2810	6.39	2910	6.97	3000	7.45	3090	8.07	3180	8.64
2530	6000	.....	....	.....	....	.....	....	2830	6.81	2920	7.40	3020	7.98	3110	8.57	3200	9.19	3280	9.81
2740	6500	.....	....	.....	....	.....	....	.....	....	3040	8.50	3140	9.15	3220	9.75	3300	10.50	3390	11.05
2950	7000	.....	....	.....	....	.....	....	.....	....	.....	....	3250	10.50	3330	11.00	3420	11.80	3500	12.50
3160	7500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	3460	12.70	3540	13.30	3620	14.10
3370	8000	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	3660	15.20	3760	16.10
3580	8500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	3860	17.75

PE-11

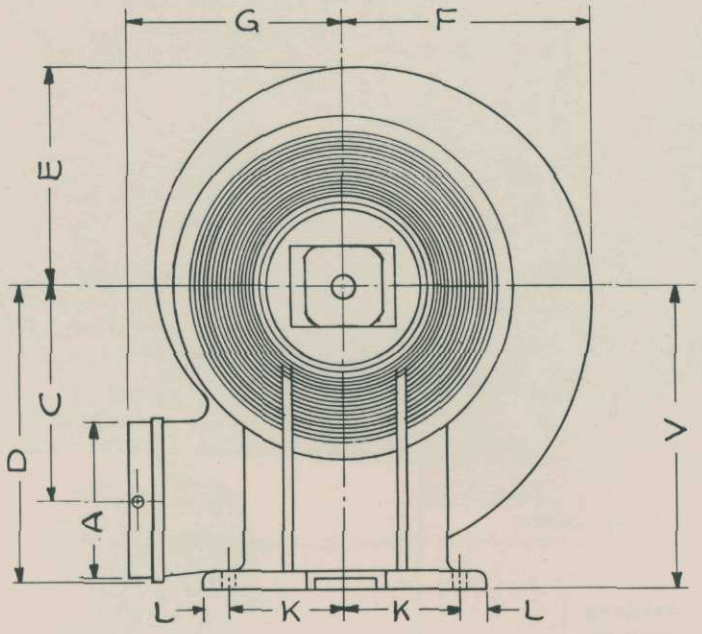
WHEEL DIA. 21"

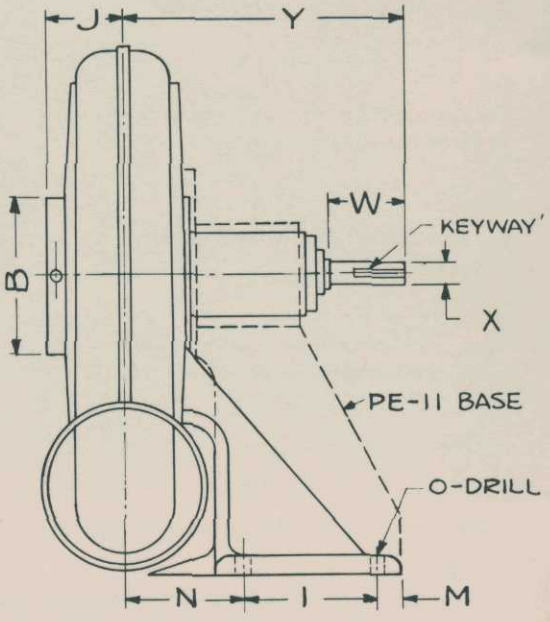
CFM	OUT. VEL.	½" SP RPM	½" SP BHP	1" SP RPM	1" SP BHP	1½" SP RPM	1½" SP BHP	2" SP RPM	2" SP BHP	2½" SP RPM	2½" SP BHP	3" SP RPM	3" SP BHP	3½" SP RPM	3½" SP BHP	4" SP RPM	4" SP BHP	4½" SP RPM	4½" SP BHP
660	1000	509	.094	656	.158	778	.228	890	.312	980	.394	1070	.483	1155	.582	.....	....	.....	....
990	1500	606	.178	734	.288	841	.391	940	.485	1025	.580	1110	.690	1190	.832	1255	.923	1330	1.06
1320	2000	717	.334	830	.455	924	.588	1010	.734	1095	.879	1170	1.01	1240	1.15	1310	1.26	1375	1.39
1650	2500	842	.592	940	.721	1030	.865	1110	1.04	1180	1.21	1250	1.38	1310	1.56	1380	1.75	1445	1.93
1980	3000	962	.916	1060	1.10	1138	1.25	1210	1.43	1270	1.61	1340	1.82	1400	2.03	1460	2.26	1520	2.49
2310	3500	1105	1.45	1180	1.62	1255	1.80	1320	1.98	1380	2.18	1445	2.38	1505	2.63	1555	2.87	1620	3.24
2640	4000	.....	....	1310	2.31	1375	2.48	1430	2.67	1495	2.88	1555	3.12	1610	3.35	1660	3.63	1710	3.86
2970	4500	.....	....	.....	....	1500	3.34	1560	3.62	1610	3.79	1660	4.00	1715	4.28	1770	4.53	1810	4.78
3300	5000	.....	....	.....	....	.....	....	1690	4.71	1735	4.97	1780	5.15	1830	5.46	1880	5.72	1925	5.99
3630	5500	.....	....	.....	....	.....	....	.....	....	1860	6.30	1900	6.53	1955	6.85	2000	7.13	2040	7.38
3960	6000	.....	....	.....	....	.....	....	.....	....	.....	....	2030	8.19	2070	8.46	2110	8.75	2150	9.06
4290	6500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2200	10.45	2240	10.75	2280	11.00
4620	7000	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2360	12.85	2400	13.20
4950	7500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2530	14.40

CFM	OUT. VEL.	5" SP RPM	5" SP BHP	5½" SP RPM	5½" SP BHP	6" SP RPM	6" SP BHP	7" SP RPM	7" SP BHP	8" SP RPM	8" SP BHP	9" SP RPM	9" SP BHP	10" SP RPM	10" SP BHP	11" SP RPM	11" SP BHP	12" SP RPM	12" SP BHP
1320	2000	1435	1.53	1500	1.67	1560	1.82	1670	2.18	1775	2.50	1870	2.81	1965	3.20	2060	3.58	2140	3.88
1650	2500	1505	2.10	1560	2.26	1610	2.40	1720	2.71	1820	3.08	1910	3.44	2000	3.83	2090	4.25	2170	4.60
1980	3000	1575	2.68	1630	2.88	1680	3.10	1780	3.57	1880	3.88	1960	4.23	2050	4.64	2130	5.04	2220	5.47
2310	3500	1660	3.36	1710	3.64	1765	3.89	1855	4.40	1950	4.93	2030	5.34	2120	5.84	2200	6.24	2280	6.71
2640	4000	1760	4.14	1810	4.50	1850	4.72	1940	5.30	2025	5.89	2110	6.48	2190	7.05	2260	7.56	2340	8.13
2970	4500	1860	5.10	1905	5.36	1945	5.66	2040	6.38	2120	7.03	2190	7.65	2270	8.06	2350	9.00	2420	9.60
3300	5000	.....	....	2010	6.60	2060	6.89	2140	7.56	2210	8.25	2290	9.00	2360	9.65	2430	10.45	2500	11.10
3630	5500	.....	....	.....	....	2160	8.30	2240	8.99	2310	9.66	2390	10.45	2460	11.20	2530	12.00	2600	12.85
3960	6000	.....	....	.....	....	.....	....	2350	10.65	2420	11.50	2500	12.30	2550	12.90	2620	13.90	2690	14.75
4290	6500	.....	....	.....	....	.....	....	.....	....	2530	13.35	2600	14.40	2660	15.00	2730	15.95	2790	16.75
4620	7000	.....	....	.....	....	.....	....	.....	....	.....	....	2690	16.30	2770	17.40	2840	18.20	2890	19.10
4950	7500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2880	20.00	2940	20.80	3000	21.80
5280	8000	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	3050	24.10	3110	24.90
5610	8500	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	3220	28.50

TYPE "PE" BELTED CENTRIFUGAL FANS

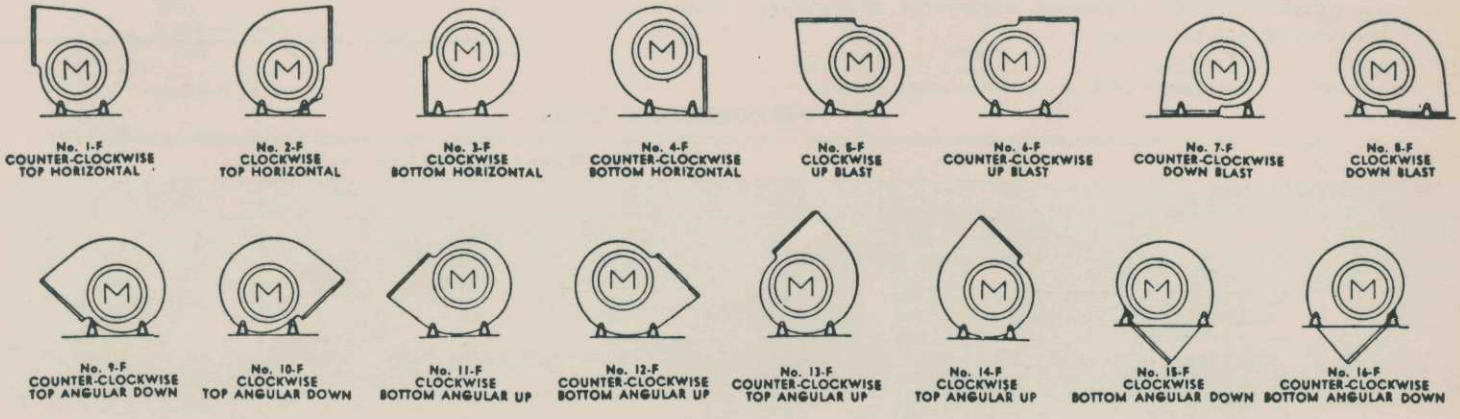
DIMENSIONS AND WEIGHTS





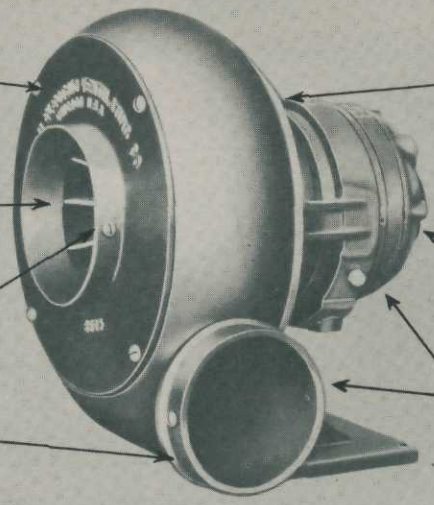
SIZE	WHEEL DIA.	DIMENSIONS IN INCHES																			WEIGHTS	
		A	B	C	D	E	F	G	I	J	K	L	M	N	O	V	W	X	Y	KEYWAY	NET	SHIP.
PE-9	17	9	9	12 3/16	17	13 1/2	15	13	6	4 3/4	7	1	1	7	9/16	17 1/4	4	1 3/16	15	3/16 x 3/32	150	260
PE-11	21	11	11	15 1/8	20 3/4	16 1/2	18 1/2	16	7	5 3/4	8 1/2	1 1/2	1	8 1/2	1 1/16	21 1/4	5	1 1 1/16	18	3/8 x 3/16	200	380

Discharge Arrangements* for Type "PE" Direct Connected and Belted Centrifugal Fans



*Available in all regular N.A.F.M. discharge arrangements (see page 2).

TYPE "P" VOLUME FAN SPECIFICATIONS



Corrosion-resisting cast housing and fan wheel.

Unobstructed inlet, free from bearings or bearing supports.

Dynamically balanced radial wheel.

Angle of discharge and the rotation can be quickly changed.

Direct-Connection of motor and wheel saves space, weight, time and cost. Provides permanent alignment.

Motor custom-built by ILG in accordance with A. I. E. E. standards.

"One-Name-Plate" responsibility covers both Motor and Fan as one complete unit.

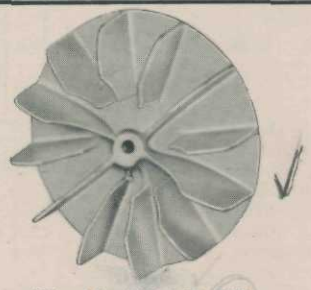
USE—For exhausting fumes from chemical laboratories, handling light dust from polishing wheels and grinders, or any small exhaust purpose where considerable resistance is caused by long run of duct. Often built into other machines such as automatic doughnut machine, label making machine, heat treatment cabinets, electronic equipment, etc. 7½ P at 3400 Rpm can be used on single-fire blacksmith forges.

SIZES AND CAPACITIES—4 sizes, 7 capacities, suitable for the complete range of small volume pressure requirements.

CONSTRUCTION—Heavy, cast, one-piece housing can be rotated to required discharge positions permitting fan installations of greater compactness. Cast wheel for lightest possible weight on bearings and resistance to corrosive fumes. Substantial base for ease of mounting on ceiling, side wall, platform, or floor.

SPECIAL CONSTRUCTION OR COATINGS—For resistance to chemical action, are available at extra cost. Also available: drain opening.

MOTORS—Wound for circuits and voltages as listed on next page. Explosion-proof, drip-proof, water-proof, or water-tight motors available at extra cost.



Wheel for 10P, 15P, 20P

Cast-aluminum, radial type wheels are furnished for all "P" Volume Fans. The wheel above is used for sizes 10P, 15P, and 20P. The wheel below, without back plate, is supplied on size 7½ P. Each wheel is dynamically balanced at rated speeds.

Wheel for 7½ P

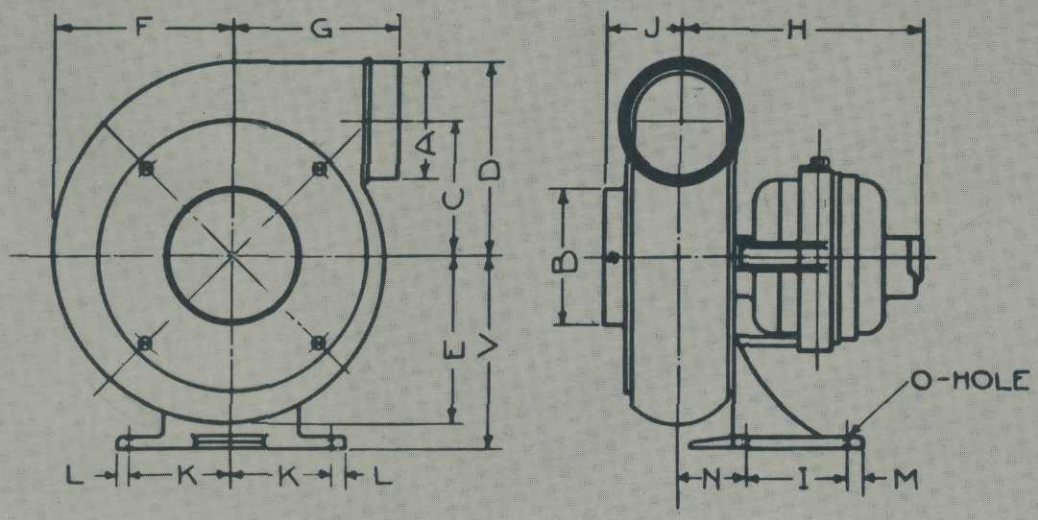
PERFORMANCE TABLE

Fan Size	Rated Rpm	STATIC PRESSURE IN INCHES OF WATER						
		¼	½	¾	1	1½	2	3
		Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm
7½P	3400	250	235	225	215	190	165	80
10P	*1425	153	125	67	0	0	.....	.....
10P	1750	208	184	156	118	85	0	.....
15P	*1425	320	250	185	110	0	.....	.....
15P	1750	415	375	330	280	150	0	.....
20P	*1425	1030	980	920	850	710	550	0
20P	1750	1180	1130	1085	1040	945	845	600

*1420 Speed on 25 Cycle and 50 Cycle.

Size	Rpm	Hp	STATIC PRESSURE IN INCHES OF WATER													
			¼	½	¾	1	1½	2	2½	3	3½	4	4½	5	6	6½	7
			Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm	Cfm
10P	3400	1/3	445	435	423	411	374	360	330	296	261	223	175	.....	.....	.....	.....
15P	3400	1	.....	.....	.....	.....	.....	.....	.....	.....	610	575	535	490	385	300	.....
15P	3400	1½	.....	.....	.....	760	730	700	670	640	.....	.....	.....	.....	.....	.....	.....

TYPE "P" VOLUME FAN DIMENSIONS



DIMENSIONS IN INCHES

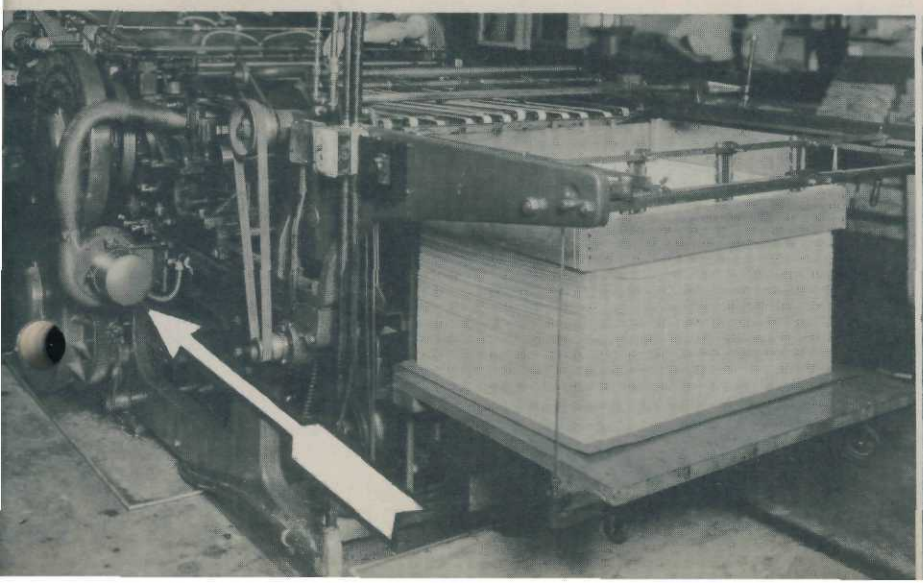
Size	Wheel Dia. In.	A	B	C	D	E	F	G	H A.C.	H D.C.	I	J	K	L	M	N	O	V
7½	6¾	3	4⅞	4¼	5¾	5	5⅜	4 13/16	9½	10	3	2⅛	2 15/16	⅜	½	2 3/16	9/32	6⅜
10	8 5/16	3⅜	5½	5 3/16	7	5⅞	6 7/16	5½	9½	10	3	2 13/16	3	½	¾	2	1 1/32	7⅞
15	9⅞	5	5⅞	5¼	7¾	6⅞	7 5/16	7⅛	11	12	4¾	3 5/16	4½	½	½	2⅞	⅜	8⅛
20	14	6¾	7¾	7 3/16	10 9/16	9 15/16	9 15/16	9 13/16	13¾	16¾	2⅝	4 9/16	5	1	1	5 5/16	7/16	11

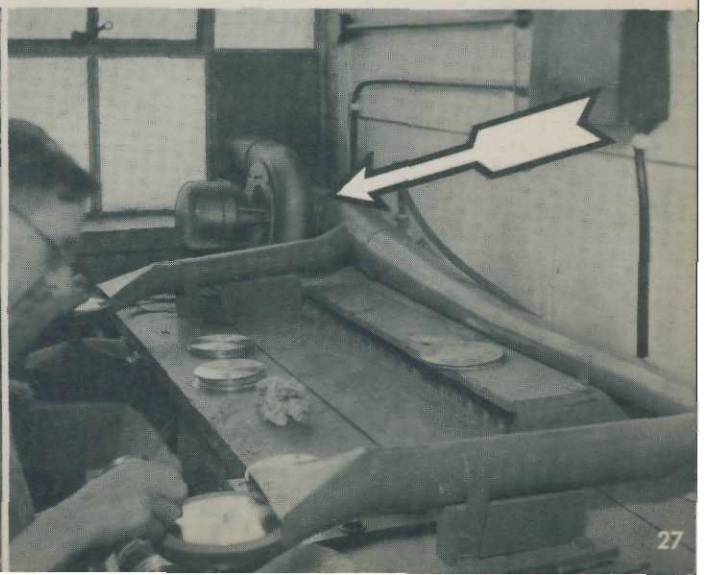
CATALOG NUMBERS, RATINGS AND WEIGHTS

Size	Rpm	Hp	Shipping Weight, Lbs.	CATALOG NOS.—ALTERNATING CURRENT						** CATALOG NOS. —DIRECT CURRENT	
				60 CYCLE 1 PHASE CONSTANT SPEED		25 CYCLE 1 PHASE		*3 PHASE 60 CYCLE			
				110 V.	220 V.	110 V	220 V.	220 V.	440 V.	110 V.	220 V.
7½P	3400	1/3	56	P600	P601	.....	.....	P604	P605	P606	P607
10P	1425	1/10	78	.....	.....	P610	P611	.....	.....	.....	.....
10P	1750	1/10	78	P616	P617	.....	.....	P620	P621	P622	P623
10P	3400	1/3	85	P624	P625	.....	.....	P628	P629	.....	.....
15P	1425	1/6	105	.....	.....	P634	P635	.....	.....	.....	.....
15P	1750	1/6	100	P640	P641	.....	.....	P644	P645	P646	P647
15P	3400	1	125	P648	P649	.....	.....	P652	P653	.....	.....
15P	3400	1½	140	P656	P657	.....	.....	P660	P661	.....	.....
20P	1425	1¼	245	.....	.....	P666	P667	.....	.....	.....	.....
20P	1750	1¼	250	P672	P673	.....	.....	P676	P677	P678	P679

*The ILG guarantee on two or three phase motors is void unless the circuit is provided with a motor starter incorporating thermal overload protection of the proper size.

**Enclosed speed regulators are furnished with DC motors.





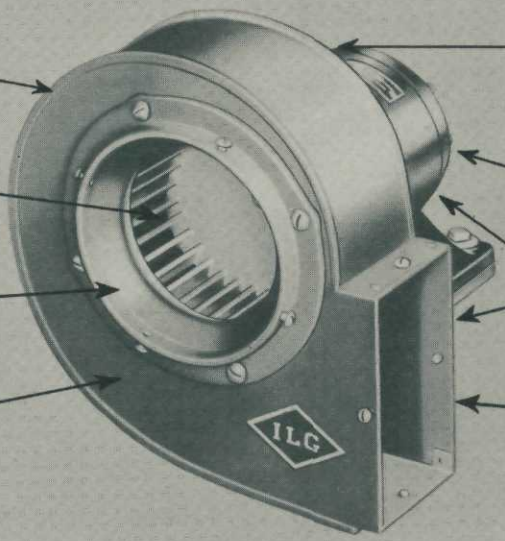
TYPE "B" VOLUME FAN SPECIFICATIONS

Die-cut steel housing with cast inlet opening.

Dynamically balanced, forward curved, steel multi-blade wheel.

Unobstructed inlet, free from bearings or bearing supports.

Available with clockwise or counter-clockwise rotation.



Direct-connection of motor and wheel saves space, weight, time and cost. Provides permanent alignment.

Motor custom-built by ILG in accordance with A. I. E. E. standards.

"One-Name-Plate" responsibility covers both Motor and Fan as one complete unit.

Angle of discharge can be changed at any time. Rotation cannot be changed.

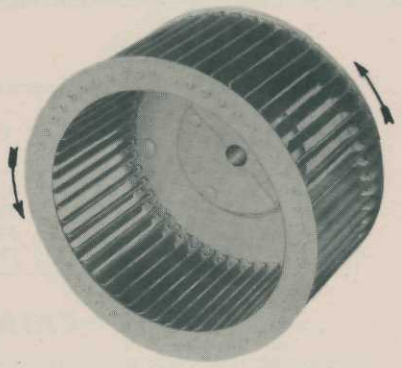
USE—All types of blow-in or exhaust duty where low pressure, small volume, quiet operation are required. Particularly adapted for applications in offices, toilets, projection booths, telephone booths, kitchens, etc., where air is moved through ducts.

SIZES AND CAPACITIES—5 sizes in 12 capacities.

CONSTRUCTION—Die-cut steel housing mounted on common cast base with motor. Design permits simplified mounting for any angle of discharge. Discharge can be changed at any time by removing flange bolts and rotating housing to desired angle. Removal of inlet flange permits quick removal of wheel through inlet opening. Cast inlet flange and steel outlet flange are designed for easy connection of ducts. Steel wheel has high capacity coupled with low power consumption and quiet operation.

SPECIAL CONSTRUCTION OR COATINGS—For resistance to chemical action, are available at extra cost. Also available: drain opening; shaft cooler for handling up to 500° F. air (standard construction will handle up to 250° F. air); non-ferrous wheels.

MOTORS—Wound for circuits and voltages as listed on next page. Explosion-proof, drip-proof, water-proof, or water-tight motors available at extra cost.



MULTI-BLADE WHEEL WITH FORWARD CURVED BLADES

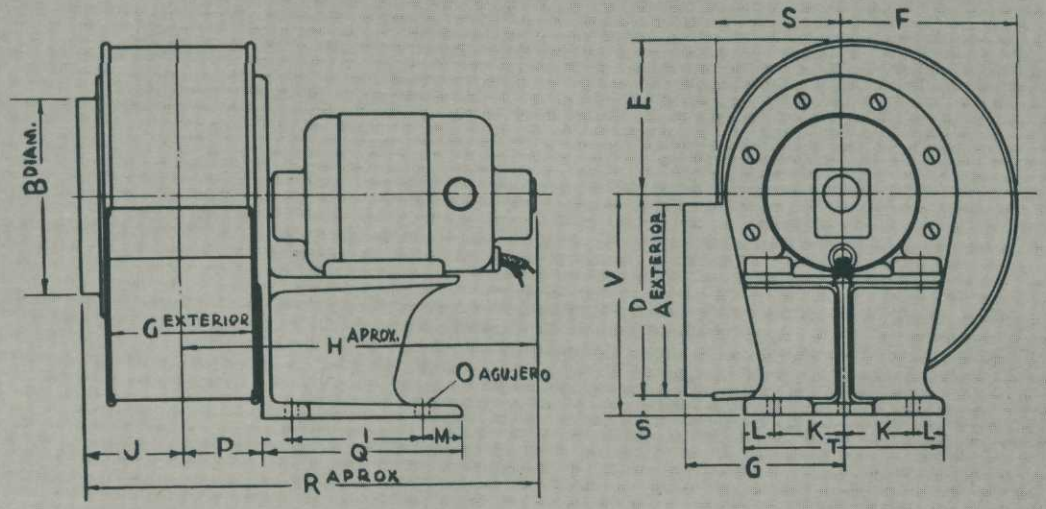
Made of special heat treated steel. Die formed forward curved blades are welded to rim and back plate. Dynamically balanced at rated speeds to eliminate vibration and lengthen motor bearing life.

PERFORMANCE DATA IN Cfm. AT VARIOUS PRESSURES

Size	Rpm	Hp	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"
B-9	1140	1/70	145	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	*1425	1/30	200	170	120	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1750	1/20	255	235	205	170	.....	.....	.....	.....	.....	.....	.....	.....
B-12	1140	1/20	370	320	250	.....	.....	.....	.....	.....	.....	.....	.....	.....
	*1425	1/10	480	450	400	350	250	.....	.....	.....	.....	.....	.....	.....
	1750	1/6	.....	.....	.....	515	475	435	390	300	.....	.....	.....	.....
B-15	855	1/15	520	430	300	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1140	1/7	725	680	610	530	400	.....	.....	.....	.....	.....	.....	.....
	*1425	1/3	940	900	860	810	750	680	600	470	.....	.....	.....	.....
	1750	1/2	.....	.....	.....	.....	1030	990	940	900	780	600	.....	.....
B-18	* 710	1/8	750	630	400	.....	.....	.....	.....	.....	.....	.....	.....	.....
	855	1/7	.....	820	710	500	.....	.....	.....	.....	.....	.....	.....	.....
	1140	1/3	.....	.....	1140	1070	985	880	720	.....	.....	.....	.....	.....
	*1425	2/3	.....	.....	.....	.....	1410	1350	1280	1210	1030	.....	.....	.....
	1750	1 1/4	.....	.....	.....	.....	.....	1810	1770	1720	1610	1490	1360	1200
B-21	* 710	1/5	1210	1100	930	600	.....	.....	.....	.....	.....	.....	.....	.....
	855	1/3	1480	1380	1260	1130	960	750	.....	.....	.....	.....	.....	.....
	1140	3/4	.....	.....	1880	1800	1700	1620	1500	1400	1000	.....	.....	.....
	*1425	1 1/2	.....	.....	.....	2400	2340	2270	2200	2130	1980	1800	1570	.....

*710 Rpm and 1425 Rpm on 25 Cycle and 50 Cycle.

TYPE "B" VOLUME FAN DIMENSIONS



DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
B-9	4¾	4¾	3¾	5	3¾	4⅝	4	8 13/16	3¼	2½	1¾	¾	¾	1	⅜	2	5	11 5/16	3⅛	5	½	5½
B-12	6¼	6¼	5	6⅝	4 13/16	5⅝	5¼	11½	4¾	3⅜	2½	¾	¾	1	⅜	2⅝	6½	15	4 1/16	6½	⅝	7¼
B-15	7¾	7¾	6⅛	8¼	6	7	6½	14	6	3 15/16	3¼	¾	¾	1¼	7/16	3 3/16	8	17 15/16	5	8	½	8¾
B-18	9¼	9¼	7¼	9⅞	7⅛	8⅝	7¾	17½	7½	4½	4	¾	¾	1¼	7/16	3¾	9½	22	6	9½	⅝	10½
B-21	10¾	10¾	8½	11½	8⅝	9¾	9	20¾	8¾	5⅜	4¾	¾	¾	1½	9/16	4⅜	11	26⅛	7	11	¾	12¼

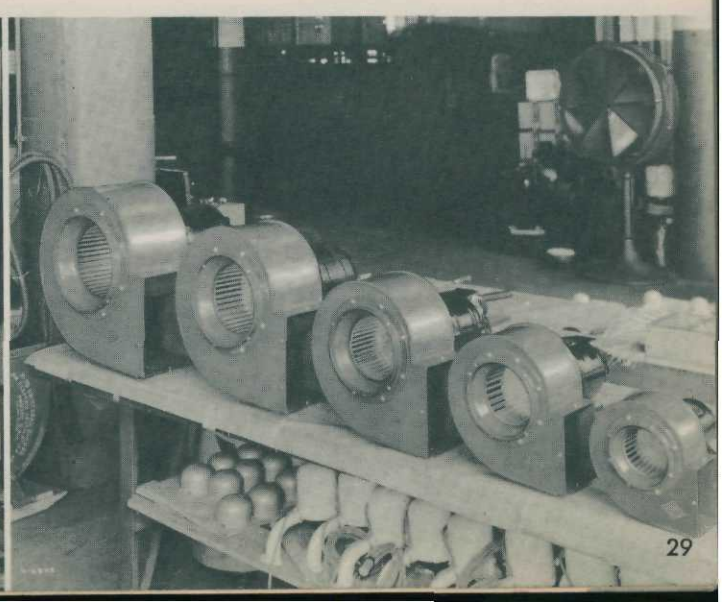
CATALOG NUMBERS, RATINGS, WEIGHTS

Size	Rpm	Hp	Free Air Cfm	Shipping Weight, Lbs.	CATALOG NOS.—60 CYCLE A.C.				CATALOG NOS.—DIRECT CURRENT			
					1 PHASE		*3 PHASE		LESS REGULATOR		WITH REGULATOR	
					110 V.	220 V.	220 V.	440 V.	115 V.	230 V.	115 V.	230 V.
B9	1140	1/70	180	25	3B00	3B01	.....	.....	3B04	3B05	3B06	3B07
B9	1750	1/20	275	30	3B08	3B09	.....	.....	3B12	3B13	3B14	3B15
B12	1140	1/20	410	60	3B16	3B17	.....	.....	3B20	3B21	3B22	3B23
**B12	1750	1/6	630	55	3B24	3B25	.....	.....	3B28	3B29	3B30	3B31
B15	855	1/15	600	100	3B32	3B33	.....	.....	3B36	3B37	3B38	3B39
B15	1140	1/7	790	100	3B40	3B41	.....	.....	3B44	3B45	3B46	3B47
**B15	1750	1/2	1200	115	3B48	3B49	3B50	3B51	3B52	3B53	3B54	3B55
B18	855	1/7	1000	140	3B56	3B57	3B58	3B59	3B60	3B61	3B62	3B63
B18	1140	1/3	1340	135	3B64	3B65	3B66	3B67	3B68	3B69	3B70	3B71
**B18	1750	1¼	2050	200	3B72	3B73	3B74	3B75	3B76	3B77	3B78	3B79
B21	855	1/3	1580	250	3B80	3B81	3B82	3B83	3B84	3B85	3B86	3B87
B21	1140	3/4	2100	260	3B88	3B89	3B90	3B91	3B92	3B93	3B94	3B95

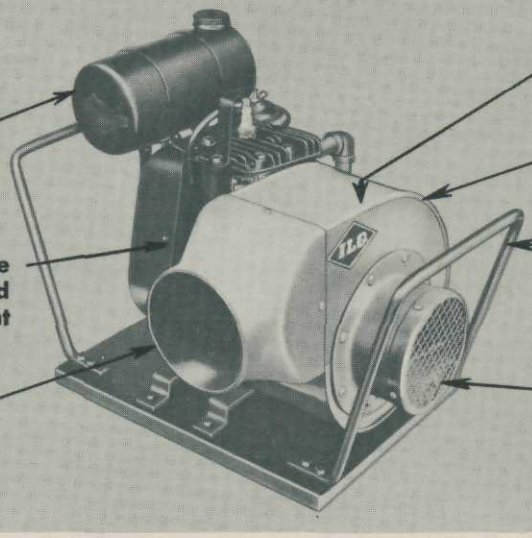
Regulator required on ½ Hp, DC motors and larger.

***The ILG guarantee on two or three phase motors is void unless the circuit is provided with a motor starter incorporating thermal overload protection of the proper size.**

****These units should not be used for free air delivery where quiet operation is essential.**



GASOLINE ENGINE DRIVEN TYPE "B" VOLUME CENTRIFUGAL FANS



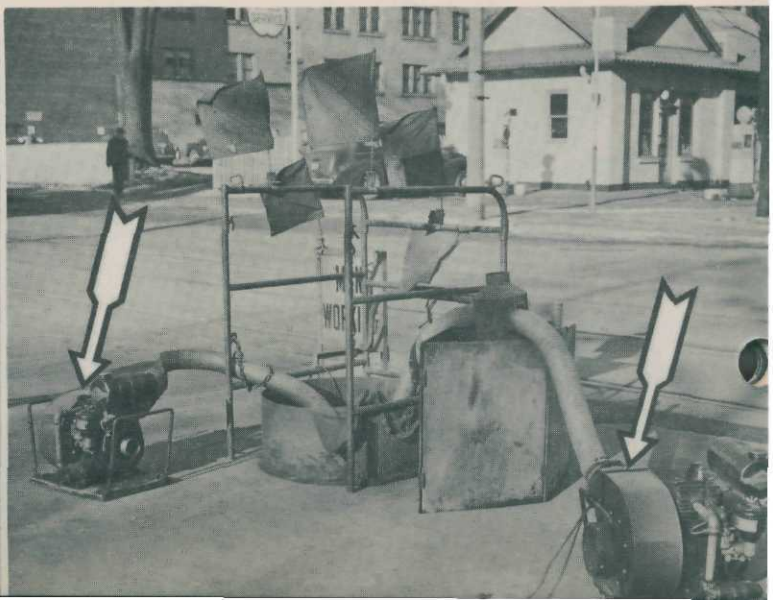
USE—Self-contained portable ventilating unit for use in manholes, vats, tanks and other places where electric power is not available.

SIZES AND CAPACITIES—2 sizes, with capacities of 630 and 1200 Cfm, as shown in table below.

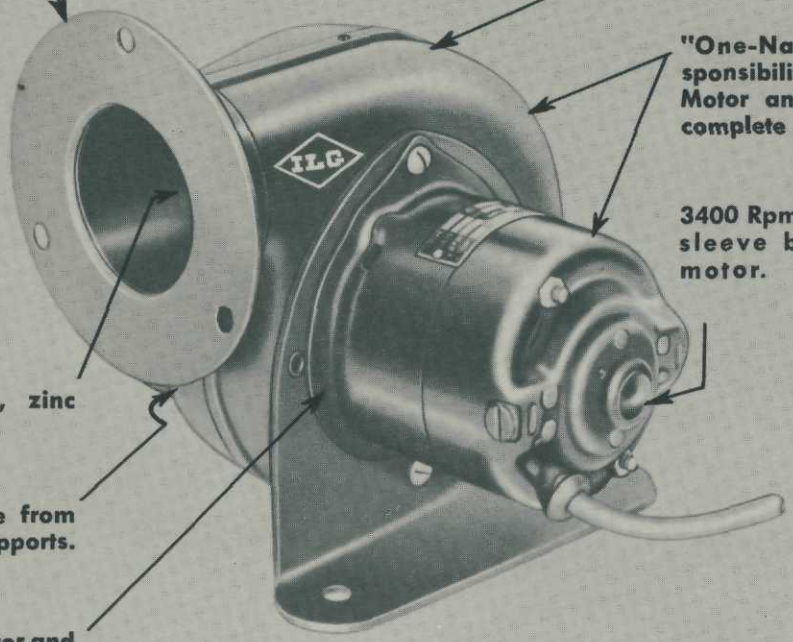
CONSTRUCTION—Same Type "B" Centrifugal Fan as described on page 28, direct-connected to 4-cycle gasoline engine. Mounted on rigid base, with carrying handle. Screened inlet. Outlet and inlet connections accommodate collapsible, reinforced, flexible hose for conveying fresh air from fan to area requiring ventilation. No batteries required. 2F discharge only.

Size	Capacity Cfm	Speed Rpm	Horse Power	Gas Consumption Pints Per Hr.	Tank Capacity, Gallons	O. D. Hose Connections	Overall Dimensions			Weight in Pounds	
							Height	Width	Depth	Net	Shipping
B-12	630	1750	1/6	1/3	1/4	5⅝"	14½"	16"	23"	60	95
B-15	1200	1750	1/2	1	1	6⅝"	21"	18"	23½"	90	125

Type "B" Volume Centrifugal Fans supply air to men working in manholes. Heaters shown for heating air in cold weather are not supplied by ILG.



TYPE "6S" UTILITY FAN SPECIFICATIONS



USE—Extremely compact, direct-connected unit particularly suitable for building into apparatus which requires ventilation or air movement. Widely used for electronic tube cooling. Unit can be supplied with or without various accessories, as listed in table below. Wide pressure range. Low power input.

DIMENSIONS—See page 32.

PERFORMANCE CHART—See page 32.

CAPACITIES IN Cfm AT VARIOUS STATIC PRESSURES

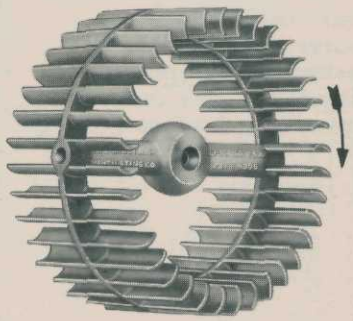
Type	Current	Rpm	0"	⅛"	¼"	⅜"	½"	⅝"
6S	A.C.	3400	63	58	52	44	32	10

CATALOG NOS., ARRANGEMENTS, WEIGHTS
110 Volts, 1 Phase, 60 Cycle

Catalog Nos.	Designation	Shipping Weight, Lbs.	Arrangement
N-920	6S	4	Fan only (housing, wheel, and motor)
N-922	6SS	4	Fan and stand only
N-924	6S1	4	Fan and inlet flange only
N-926	6SD	4	Fan discharge flange only
N-928	6S1D	5	Fan inlet and discharge flanges only
N-930	6SS1	5	Fan stand and inlet flange only
N-932	6SSD	5	Fan stand and discharge flange only
N-934	6SS1D	5	Fan stand inlet and discharge flanges

UNOBSTRUCTED INLET

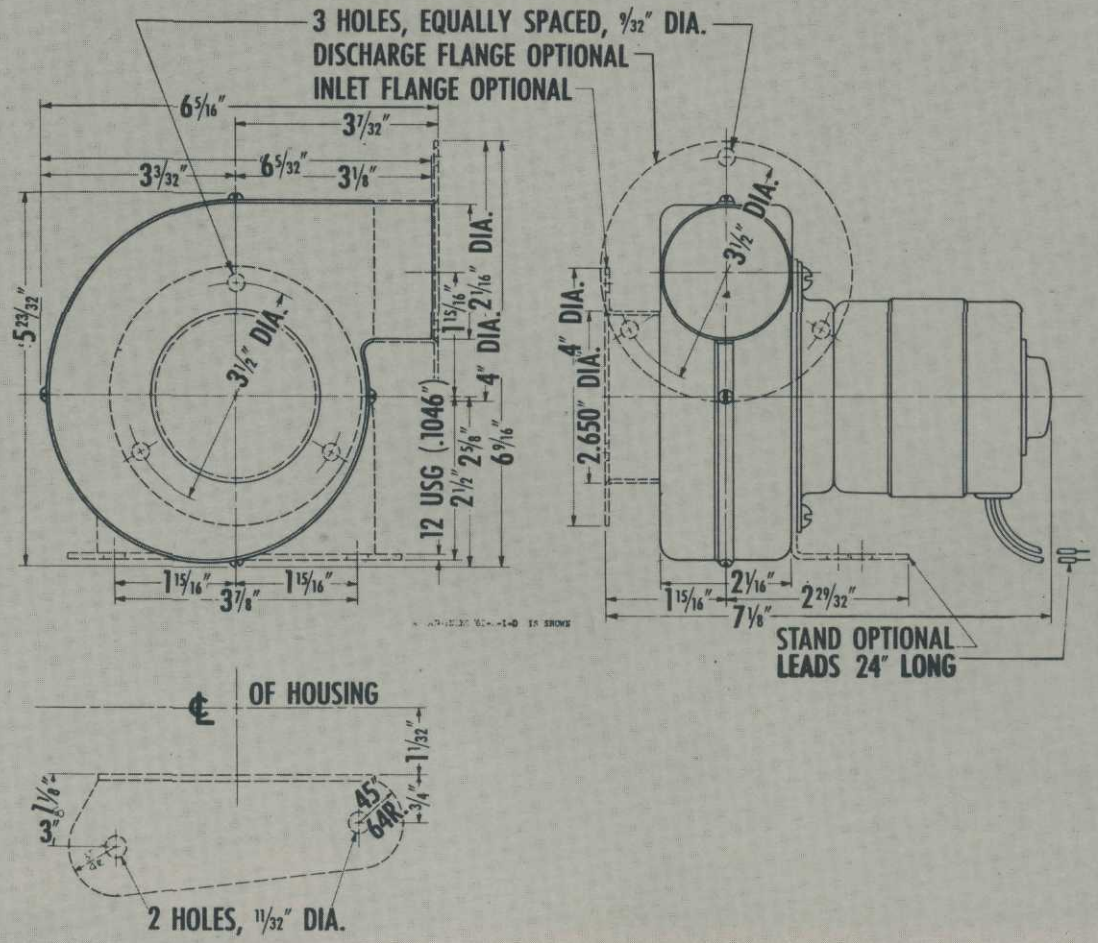
Unobstructed inlet, free from bearings or other obstructions. Supplied with or without inlet flange.



DIE-CAST FAN WHEEL

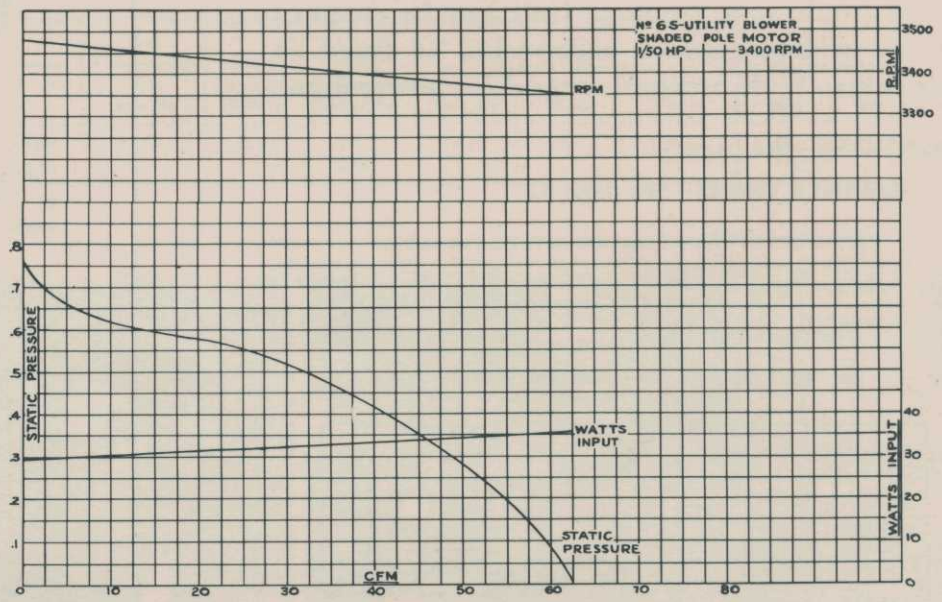
Fan wheel is a zinc die casting, dynamically balanced for quiet, highly efficient operation. Counter-clockwise discharge only.

TYPE "6S" CENTRIFUGAL FAN DIMENSIONS

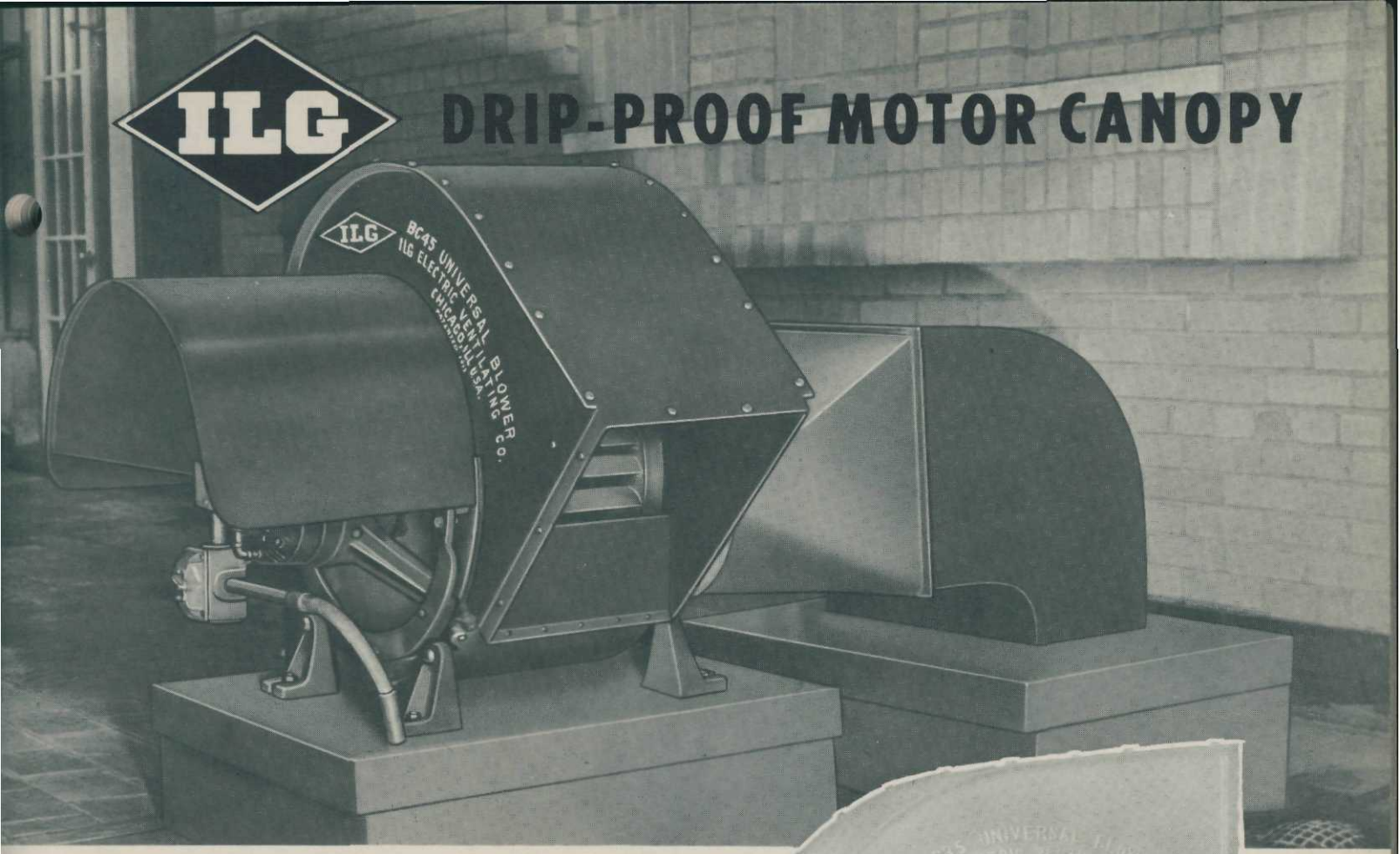


PERFORMANCE CHART

Note the steep pressure curve which assures a wide pressure range. The low power input assures inexpensive operation.

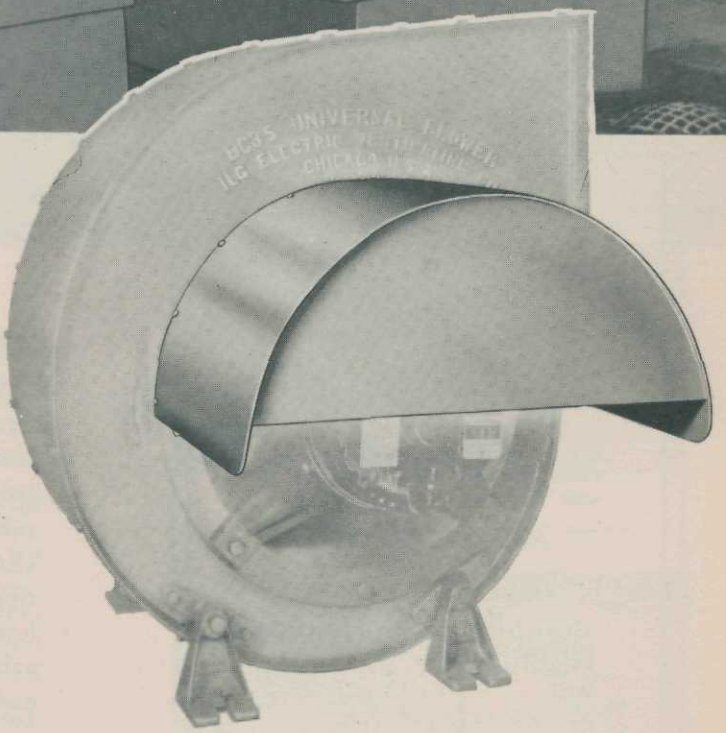


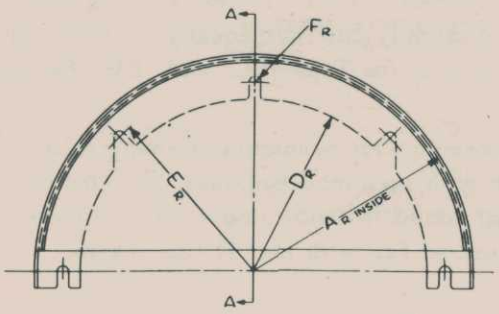
ILG DRIP-PROOF MOTOR CANOPY

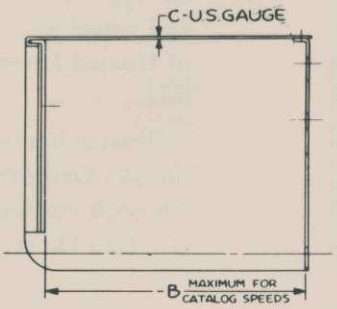


FOR TYPES "B" AND "BC" DIRECT-DRIVE CENTRIFUGAL FANS

Motor canopies are available as extra equipment to give drip-proof protection to the motor on exposed installations, permitting use of fan on the roof or in other locations where rain and snow might injure motor. Canopies may be ordered as original equipment or installed in the field. Made of heavy gauge sheet steel and painted to match fan — will last for the life of the entire unit. Easily installed on motor ring. When ordering, please specify fan size and discharge, also motor frame size and speed.





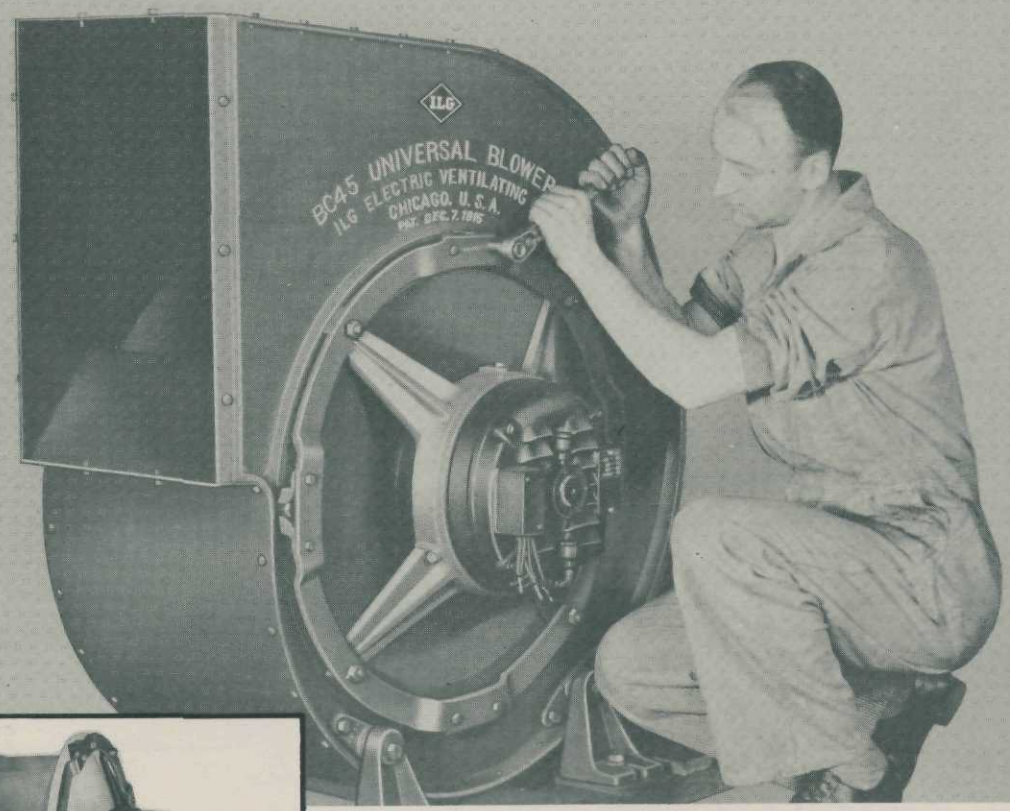


DIMENSIONS

Size	A	B	C	D	E	F	Appx. Wt.
9	3	9	20	2 3/8	2 11/16	5/32	1
12	4 1/4	10	20	3 1/4	3 1/2	5/32	1 1/2
15	5 1/16	12	20	3 7/8	4 3/8	3/16	2 1/2
18	5 7/8	14	20	4 5/16	5 1/8	3/16	3
21	7	15	20	5	7	3/16	4
25	8 7/16	18	18	6 5/8	7 1/8	1/4	8
30	10 1/4	18	18	8 1/8	8 13/16	1/4	10
35	11 1/8	20	18	9 1/2	10 1/4	5/16	12
40	12 3/4	22	18	11	11 13/16	3/16	16
45	14 5/16	23	18	12 7/16	13 5/16	3/16	18
50	15 7/8	24	18	13 7/8	14 13/16	3/8	22
55	17 7/16	25	16	15 5/16	16 5/16	3/8	32
60	19 1/8	26	16	16 3/4	17 7/8	3/8	37
65	20 13/16	33	16	18 3/4	19 7/16	3/8	49
70	22 3/4	34	14	19 5/8	21 1/8	7/16	71
80	26 7/8	35	14	22 1/2	24 1/2	7/16	88
90	30 5/8	35	14	25 3/8	27 7/8	7/16	105

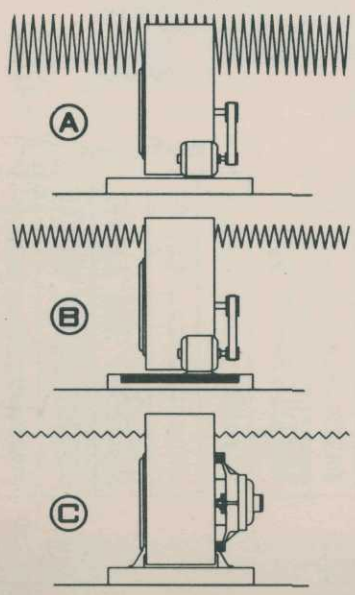
PATENTED "Floated Drive" BRACKETS

for effective, low-cost sound isolation



Simple, compact arrangement of ILG Direct-Connected motor and wheel unit with "Floated Drive."

COMPARATIVE CHART OF SOUND ISOLATION



Moving Parts "Ride in Rubber"

Extremely quiet operation can be achieved by mounting the standard ILG motor bracket in a "floating" bracket, then isolating the "floating" bracket from the fan housing with flexible rubber cushions. This exclusive, patented ILG development eliminates metal-to-metal contact . . . isolates sound and vibration at point of origin . . . prevents noise amplification by fan housing. Four point vertical floating of the weight takes advantage of all three loading factors—compression, tension, and shear—thus providing utmost dampening effect.

ILG Floated Drive shown here can be mounted at any time on Type "B" or "BC" Direct-Connected Fans, isolating motor and wheel as a unit. A slightly different, equally effective type of Floated Drive is available for Type "BC" and "BW" belted fans.

Chart at left indicates comparative amount of sound isolation on (A) Ordinary fan with no sound isolation. (B) Ordinary fan with conventional sound isolation under fan and motor. (C) ILG Direct-Connected Fan with ILG Floated Drive.

FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

PATENTED VARIABLE AIR CONTROLLER

for manual or remote electric control

Simple, shutter-like bank of vanes can be opened or closed at will of operator to increase or decrease air flow according to *requirements of the ventilating system. This exclusive ILG design* has no complicated multiplicity of parts to break or get out of order—it permits use of a standard ILG constant-speed, squirrel-cage motor direct-connected to the centrifugal fan.

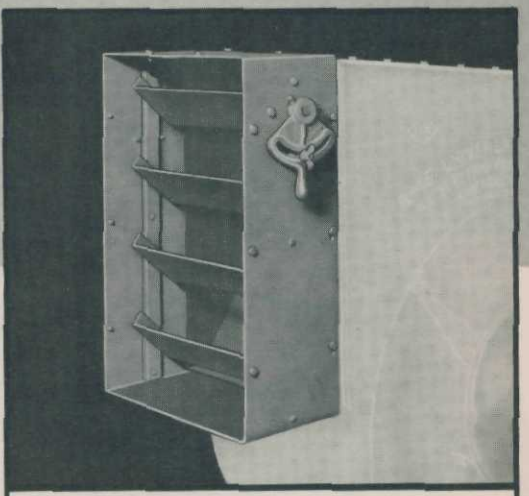
The Controller is mounted on the *discharge* side for ease of installation and operation and for simplicity of design.

Power costs are reduced, as power to drive the fan drops off with a reduction in air delivery (see performance curves on next page). Also, efficiencies and power factors of standard ILG motors operating under conditions of reduced air volume are much higher than those possible with variable speed, slip ring motors.

Available at extra cost for Type "BC" and "B" Direct-Connected, also Type "BC" and "BW" Belted Centrifugal Fans. Can be added at any time.

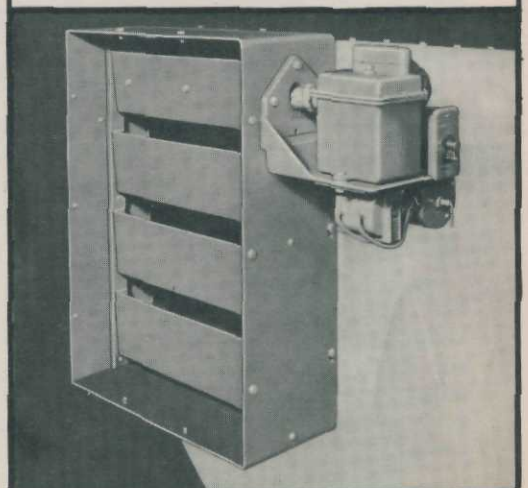
SHIPPING WEIGHTS

Fan Size	Weight	Fan Size	Weight	Fan Size	Weight
25	40 lbs.	45	65 lbs.	70	125 lbs.
30	45 lbs.	50	90 lbs.	80	150 lbs.
35	50 lbs.	55	95 lbs.	90	165 lbs.
40	60 lbs.	60	110 lbs.		



MANUAL CONTROL

Quadrant handle with locking device operates Variable Air Controller in manual type.



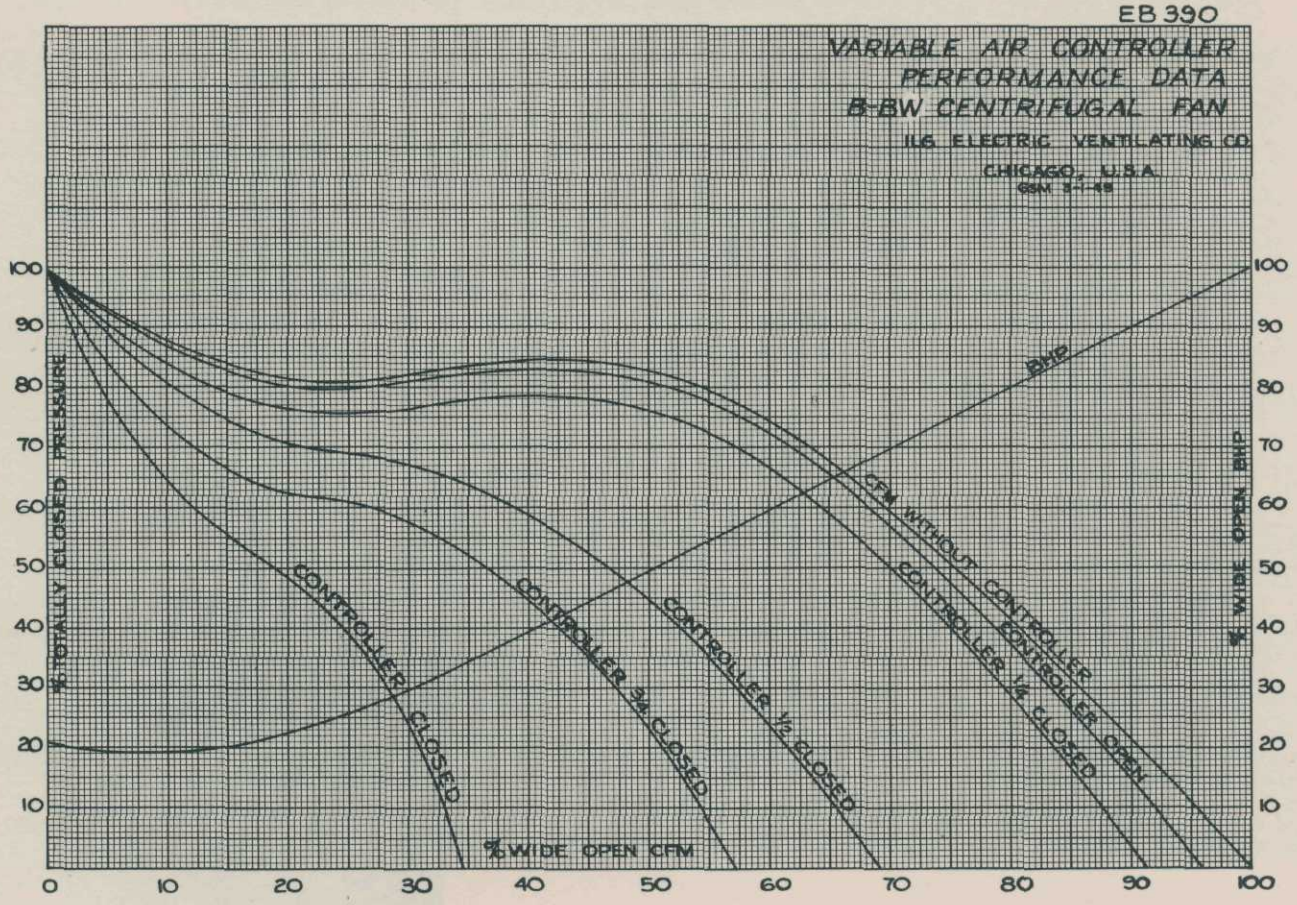
ELECTRICAL CONTROL

Remote electrical control operates Variable Air Controller by means of a small low voltage motor actuated by a pushbutton station located at any desired point, providing sufficient steps of air control.

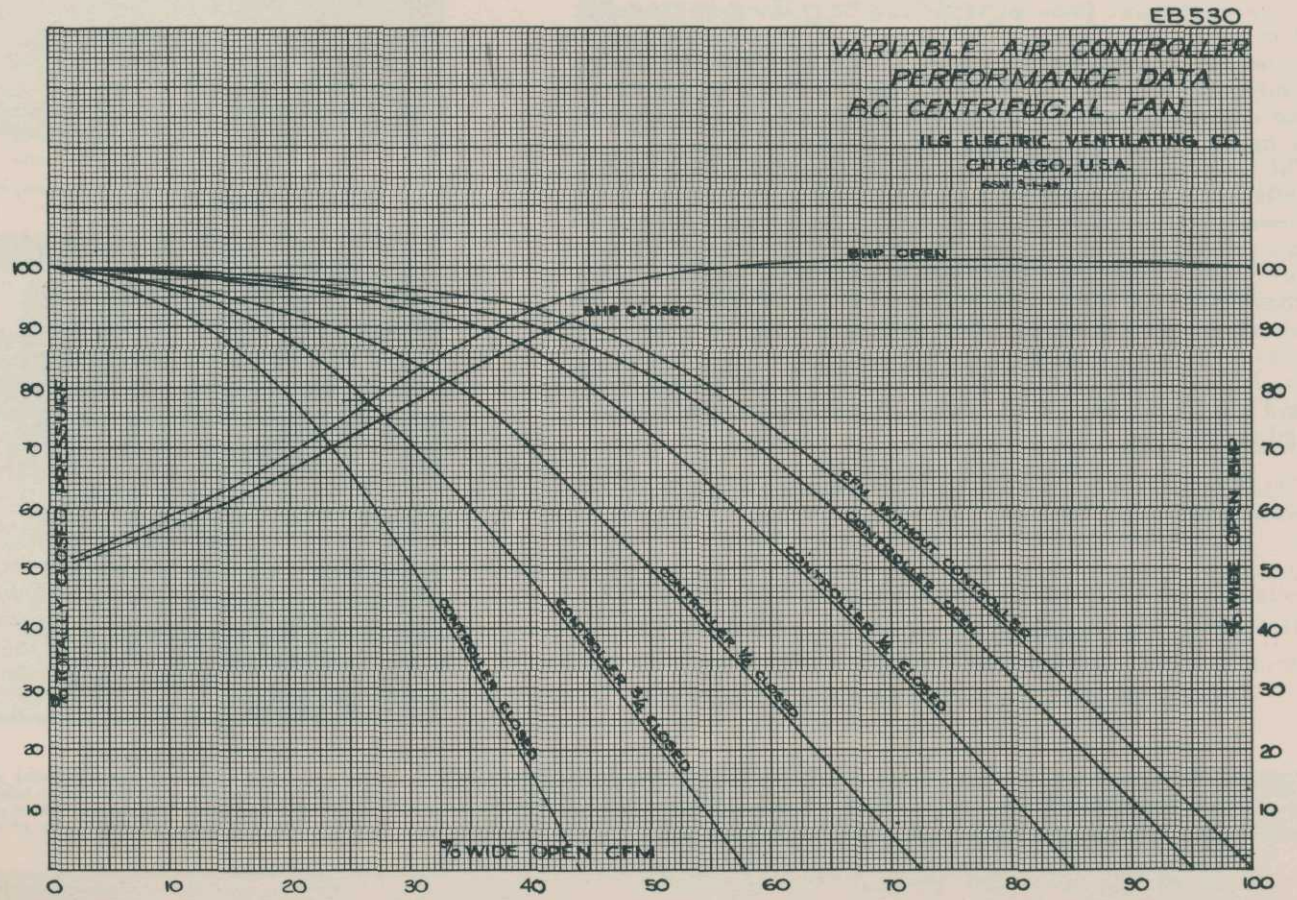
FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

VARIABLE AIR CONTROLLER PERFORMANCE DATA

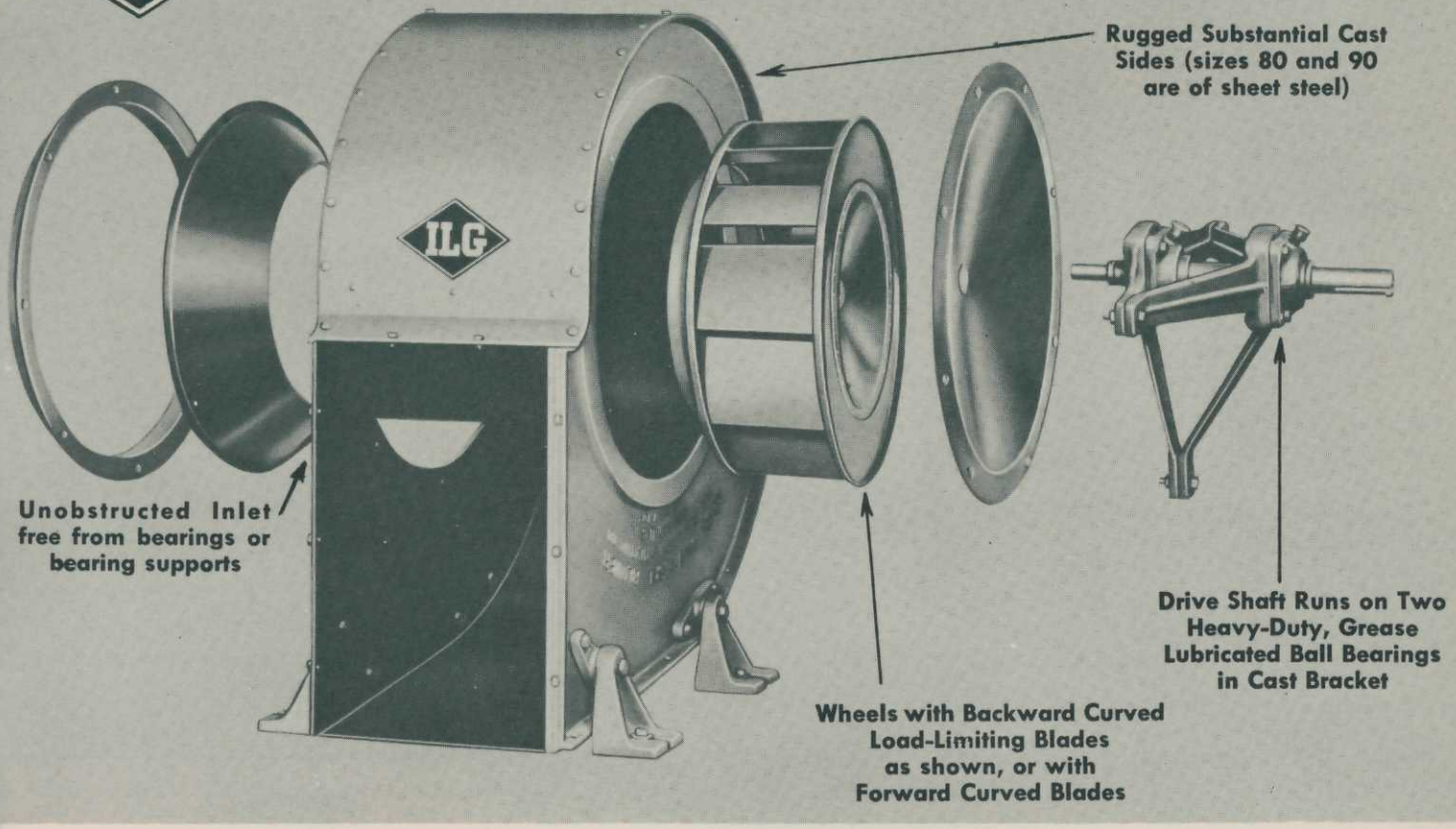
(AS USED WITH TYPE "B" DIRECT-DRIVE AND TYPE "BW" BELTED FANS)



(AS USED WITH TYPE "BC" DIRECT-DRIVE AND BELTED FANS)



ILG BELTED CENTRIFUGAL FANS

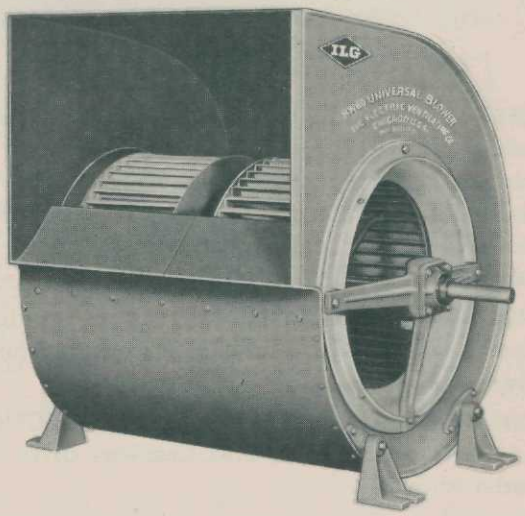


ILG now makes available complete lines of standard belted centrifugal fans. Types "BC" and "BW" Belted Fans are comparable in design and construction to Types "BC" and "B" Direct-Connected Fans.

Replacing the motor and motor bracket on these two direct-connected types is a rugged cast bracket for the drive shaft. The single width, single inlet, belted fans can be changed to direct-connected operation at any time by replacing the bearing bracket with an ILG motor and motor bracket.

Drive shaft operates on two heavy-duty, grease-lubricated ball bearings. This ball bearing construction results in remarkably quiet operation and extremely long life. The fan wheel is overhung on drive shaft—there is no bearing bracket or other obstruction in fan inlet.

Information on large size belted centrifugal fans is not included here—please write for data.



How to figure double width double inlet capacities

By referring to the tables on belted fans which follow, double the Cfm given for single width, single inlet fans to determine capacities of double width, double inlet fans. Use these factors to determine other data:

Multiply given Rpm by 1.01
Multiply given Outlet Velocity by 1.11
Multiply given Hp by 2.04

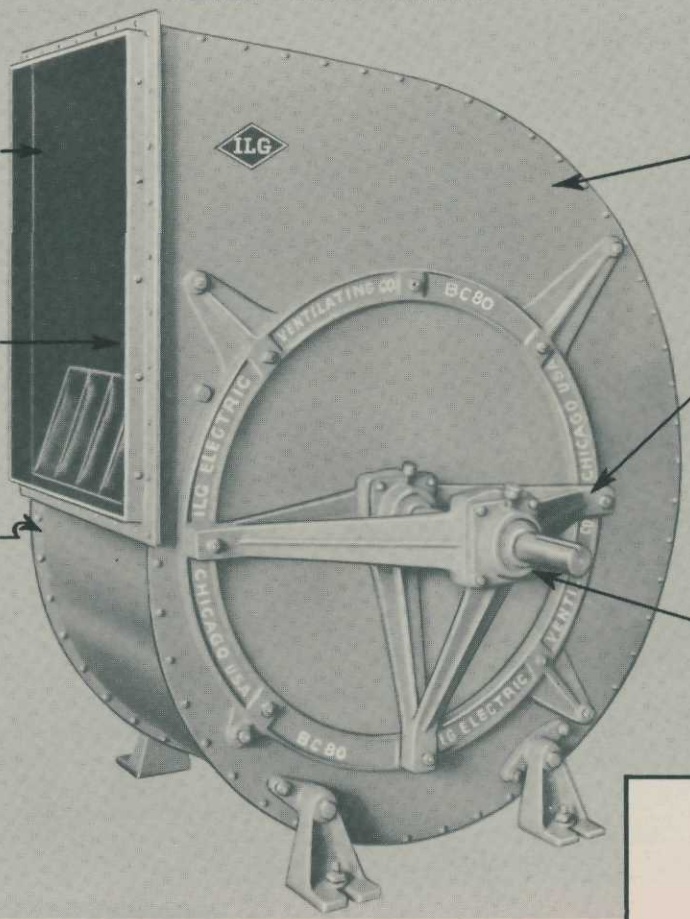
TYPE "BC" CENTRIFUGAL FAN SPECIFICATIONS

BELTED • LOAD LIMITING TYPE

Angle of discharge may be changed at any time by moving legs. Rotation cannot be changed.

Dynamically balanced, load-limiting wheel with backward curved blades.

Unobstructed inlet, free from bearings or bearing supports.



Cast sides for BC25-BC70 inclusive—steel sides on BC80 and BC90.

Heavy-duty, cast bearing bracket supports drive shaft.

Drive shaft operates quietly on two over-sized, grease-lubricated ball bearings.

Available with Floated Drive Brackets, also Variable Air Controller—see pages 34-36.

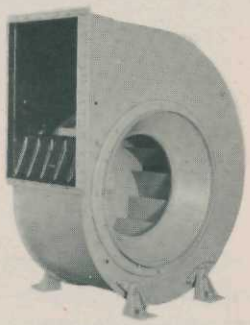
USE—Load limiting type with backward curved blades for all ventilating and air conditioning applications. Because motor load remains constant over a wide range of air volume and change in static pressure, there is neither need to specify excess motor horsepower, nor chance of motor overload where resistance is less than calculated.

SIZES AND CAPACITIES—12 single width, single inlet and 7 double width, double inlet sizes, ranging from 374 to 116,400 Cfm (see pages 39-50).

CONSTRUCTION—Cast sides on BC25-BC70 inclusive, steel sides on BC80, BC90. Steel scroll. Cast legs, drive shaft bracket, inlet and outlet connections.

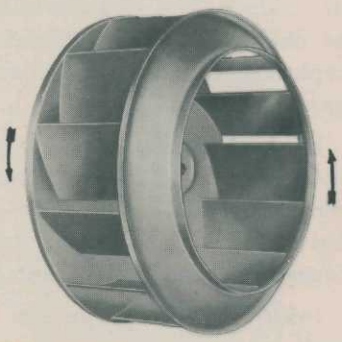
SPECIAL CONSTRUCTION OR COATINGS — For resistance to chemical action, are available at extra cost. These include special Heresite or Lithcote coatings and a range of special non-corrosive metal. (Asphaltum base paint at no extra charge.) Also available: clean-out door; drain opening; non-ferrous wheels; shaft cooler for handling up to 350° F. air; shaft cooler and back plate vanes for handling up to 500° F. air (standard construction handles up to 250° F. air).

DIMENSIONS AND WEIGHTS—See pages 51-54.



UNOBSTRUCTED INLET

With fan wheel overhung on drive shaft, inlet is free from bearings or other obstructions. Air flows smoothly—cannot be polluted with bearing oil. When equipped with Variable Air Controller, Controller is mounted on OUTLET.



LOAD-LIMITING WHEEL WITH BACKWARD CURVED BLADES

Made of special heat-treated steel for extreme strength with minimum weight, to lengthen bearing life, and to lighten motor starting load. Die-formed, backward-curved blades are welded to side and back plates. Back plate rises in smooth curve to hub, guiding air to blades of fan with minimum of eddy currents and velocity loss.

FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

TYPE BC-25 BELTED CENTRIFUGAL FAN

WHEEL DIA. 12 1/4" OUTLET AREA .748 SQUARE FEET SINGLE WIDTH, SINGLE INLET

Cfm	OUTLET VELOCITY	1/4"STATIC			3/8"STATIC			1/2"STATIC			5/8"STATIC			3/4"STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
374	500	2160	675	.021	2610	814	.032	2940	950	.044	3440	1075	.062	3770	1175	.069
449	600	2230	696	.025	2650	826	.038	2990	935	.051	3410	1053	.068	3720	1160	.077
524	700	2330	728	.029	2690	841	.044	3060	955	.059	3410	1053	.076	3690	1150	.091
599	800	2440	762	.037	2810	878	.052	3120	975	.067	3420	1070	.084	3720	1160	.102
674	900	2580	806	.045	2900	906	.060	3200	1000	.076	3490	1090	.094	3780	1178	.114
748	1000	2720	851	.053	3020	943	.070	3380	1025	.087	3560	1112	.106	3830	1196	.126
824	1100	2880	900	.062	3160	986	.082	3460	1080	.101	3670	1148	.119	3930	1225	.141
898	1200	3040	950	.072	3320	1037	.094	3530	1105	.115	3780	1180	.134	4030	1255	.150
974	1300	3200	1000	.085	3450	1077	.106	3710	1160	.131	3910	1220	.154	4150	1292	.175
1048	1400	3380	1055	.098	3600	1125	.120	3830	1198	.147	4050	1265	.173	1300	1330	.198
1122	1500	3565	1112	.113	3780	1180	.137	3980	1244	.164	4160	1307	.192	4400	1372	.220
1198	1600	3720	1160	.132	3930	1228	.155	4140	1295	.184	4340	1354	.212	4540	1415	.243
1270	1700	3910	1219	.149	4115	1283	.176	4300	1343	.205	4480	1400	.234	4650	1450	.266
1348	1800	4085	1274	.170	4280	1335	.200	4480	1400	.229	4640	1450	.259	4840	1510	.292
1422	1900	4270	1332	.197	4470	1393	.226	4625	1442	.250	4800	1500	.286	5000	1558	.320
1497	2000	4450	1388	.221	4620	1440	.245	4785	1492	.275	4970	1555	.315	5150	1605	.349
1646	2200	4800	1496	.269	4980	1553	.312	5140	1602	.343	5290	1652	.381	5480	1708	.420
1795	2400	5210	1623	.347	5360	1670	.382	5500	1715	.413	5670	1768	.458	5920	1815	.465
1945	2600	5580	1740	.426	5735	1788	.468	5880	1832	.506	6030	1880	.546	6150	1920	.580

Cfm	OUTLET VELOCITY	7/8"STATIC			1"STATIC			1 1/4"STATIC			1 1/2"STATIC			1 3/4"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
748	1000	4090	1275	.147	4340	1352	.168	4780	1490	.215	5230	1628	.258	5620	1755	.302
824	1100	4160	1300	.161	4400	1372	.184	4840	1510	.234	5260	1640	.282	5640	1760	.330
898	1200	4260	1328	.179	4470	1394	.201	4890	1525	.252	5320	1660	.308	5670	1770	.358
974	1300	4360	1360	.196	4570	1423	.222	4960	1548	.272	5340	1668	.330	5730	1788	.387
1048	1400	4480	1395	.219	4660	1454	.242	5040	1572	.295	5420	1690	.350	5790	1805	.410
1122	1500	4590	1430	.244	4790	1492	.268	5140	1605	.321	5500	1715	.376	5850	1825	.440
1198	1600	4720	1472	.270	4890	1530	.296	5240	1638	.350	5600	1747	.410	5930	1850	.470
1270	1700	4860	1515	.297	5020	1570	.325	5360	1670	.381	5690	1775	.440	6000	1872	.505
1348	1800	5010	1565	.342	5160	1614	.358	5500	1715	.420	5810	1812	.478	6110	1910	.543
1422	1900	5150	1609	.352	5290	1655	.388	5630	1755	.460	5930	1850	.518	6210	1940	.583
1497	2000	5290	1650	.381	5450	1705	.419	5760	1800	.500	6000	1885	.562	6340	1980	.630
1646	2200	5630	1755	.450	5740	1798	.490	6040	1882	.572	6290	1962	.635	6600	2060	.730
1795	2400	5950	1856	.533	6060	1898	.572	6350	1980	.660	6610	2065	.745	6880	2145	.840
1945	2600	5650	1761	.630	6410	2000	.670	6670	2080	.763	6920	2160	.855	7150	2230	.950
2100	2800	6640	2072	.740	6770	2110	.785	7000	2185	.887	7240	2260	.992	7460	2330	1.07
2245	3000	6990	2180	.858	7110	2217	.903	7320	2285	1.00	7560	2360	1.10	7750	2420	1.19
2395	3200	7350	2290	1.00	7460	2325	1.04	7680	2395	1.14	7590	2460	1.25	8110	2530	1.35
2545	3400	7670	2390	1.12	7830	2440	1.19	8020	2500	1.30	8240	2570	1.41	8370	2615	1.70
2695	3600	8050	2510	1.30	8180	2550	1.36	8370	2610	1.47	8560	2670	1.59	8700	2715	1.70

Cfm	OUTLET VELOCITY	2"STATIC			2 1/4"STATIC			2 1/2"STATIC			2 3/4"STATIC			3"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1120	1500	6160	1925	.500	6490	2025	.570	6830	2130	.640	7110	2220	.700	7400	2310	.770
1195	1600	6230	1945	.540	6550	2045	.590	6860	2140	.670	7150	2230	.750	7440	2320	.820
1272	1700	6320	1973	.570	6610	2065	.640	6920	2160	.710	7200	2250	.785	7500	2340	.870
1345	1800	6410	2000	.610	6700	2090	.679	6990	2180	.750	7260	2265	.830	7530	2350	.905
1420	1900	6500	2030	.650	6780	2115	.720	7060	2205	.800	7340	2290	.870	7600	2370	.955
1495	2000	6620	2065	.700	6890	2150	.770	7150	2230	.850	7400	2310	.925	7670	2395	1.00
1645	2200	6860	2140	.790	7100	2215	.870	7340	2290	.960	7600	2370	1.05	7840	2445	1.12
1795	2400	7110	2220	.930	7340	2290	1.00	7590	2365	1.07	7810	2440	1.15	8160	2550	1.24
1945	2600	7380	2305	1.04	7610	2375	1.14	7840	2445	1.23	8040	2510	1.30	8280	2585	1.39
2090	2800	7680	2395	1.17	7880	2462	1.27	8100	2530	1.38	8300	2590	1.46	8510	2655	1.55
2245	3000	7960	2490	1.31	8170	2550	1.41	8390	2620	1.54	8590	2680	1.64	8780	2740	1.76
2390	3200	8300	2590	1.45	8500	2650	1.56	8670	2705	1.68	8880	2770	1.80	9060	2830	1.94
2540	3400	8610	2690	1.61	8800	2745	1.74	9000	2810	1.86	9260	2890	2.04	9340	2915	2.12
2690	3600	8940	2790	1.81	9140	2850	1.94	9290	2900	2.06	9450	2950	2.16	9640	3010	2.31
2840	3800	9220	2895	2.02	9450	2950	2.14	9610	3000	2.25	9780	3055	2.40	9960	3110	2.54
2990	4000	9620	3000	2.24	9770	3050	2.39	9930	3100	2.65	10100	3150	2.63	10250	3205	2.77
3140	4200	9970	3110	2.50	10130	3160	2.63	10300	3210	2.77	10380	3240	2.90	10600	3310	3.04
3290	4400	10320	3220	2.76	10450	3260	2.88	10620	3315	3.05	10750	3360	3.18	10900	3405	3.33
3440	4600	10660	3325	3.03	10800	3370	3.18	10960	3420	3.33	11080	3460	3.46	11250	3510	3.65
3590	4800	11020	3440	3.35	11170	3485	3.51	11320	3530	3.65	11420	3565	3.80	11600	3620	3.96
3740	5000	11380	3550	3.67	11520	3595	3.83	11670	3640	3.98	11860	3700	4.22	11900	3725	4.35

Figures below heavy line indicate that fans running at 7500 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-30 BELTED CENTRIFUGAL FAN

WHEEL DIA. 15" — OUTLET AREA 1.152 SQUARE FEET — SINGLE WIDTH, SINGLE INLET

Cfm	OUTLET VELOCITY	1/4"STATIC			3/8"STATIC			1/2"STATIC			5/8"STATIC			3/4"STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
575	500	2200	561	.034	2630	670	.053	3030	770	.073	3340	850	.093	3670	935	.119
690	600	2300	585	.040	2700	688	.061	3040	775	.083	3370	860	.108	3690	940	.132
805	700	2410	615	.048	2790	705	.069	3110	793	.093	3382	872	.120	3710	945	.156
920	800	2550	650	.057	2900	730	.079	3190	812	.105	3490	890	.132	3770	961	.163
1035	900	2700	690	.068	3040	768	.093	3320	843	.121	3590	915	.148	3860	980	.182
1150	1000	2860	730	.082	3180	805	.108	3450	875	.137	3700	936	.165	3970	1000	.196
1268	1100	3040	773	.096	3330	850	.126	3610	910	.154	3790	970	.185	4090	1030	.220
1382	1200	3200	816	.114	3490	885	.146	3750	945	.175	3960	1010	.209	4220	1067	.247
1498	1300	3370	860	.132	3650	930	.166	3900	985	.201	4110	1048	.242	4350	1100	.272
1612	1400	3550	904	.155	3830	970	.191	4060	1025	.222	4260	1086	.266	4490	1132	.310
1730	1500	3760	948	.180	4000	1020	.218	4220	1070	.258	4420	1126	.298	4630	1175	.340
1840	1600	3910	995	.207	4180	1055	.244	4380	1110	.288	4580	1165	.330	4760	1213	.367
1960	1700	4120	1050	.250	4340	1105	.292	4540	1157	.320	4740	1209	.365	4920	1253	.410
2070	1800	4300	1097	.285	4510	1148	.308	4690	1200	.360	4890	1246	.401	5050	1290	.454
2190	1900	4480	1142	.311	4690	1197	.357	4890	1246	.404	5060	1290	.455	5260	1335	.498
2300	2000	4670	1190	.352	4875	1242	.406	5070	1292	.455	5240	1335	.495	5420	1382	.553
2540	2200	5080	1294	.453	5250	1339	.500	5430	1384	.556	5610	1430	.612	5790	1472	.660
2760	2400	5435	1385	.550	5600	1428	.614	5780	1472	.674	5950	1517	.737	6110	1558	.788
3000	2600	5835	1487	.686	6010	1531	.751	6185	1575	.807	6330	1613	.878	6490	1652	.945
Cfm	OUTLET VELOCITY	7/8"STATIC			1"STATIC			1 1/4"STATIC			1 1/2"STATIC			1 3/4"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1152	1000	4180	1066	.235	4420	1123	.261	4790	1235	.340	5260	1340	.417	5990	1450	.505
1268	1100	4300	1094	.258	4500	1148	.290	4900	1250	.370	5300	1350	.440	5700	1452	.525
1382	1200	4420	1124	.284	4610	1174	.320	5010	1278	.400	5360	1365	.471	5750	1465	.580
1498	1300	4540	1150	.308	4730	1205	.355	5080	1290	.440	5350	1390	.515	5800	1480	.620
1612	1400	4560	1180	.339	4840	1236	.384	5230	1334	.480	5450	1415	.560	5880	1500	.660
1730	1500	4800	1223	.378	5000	1273	.423	5350	1365	.520	5670	1445	.608	5990	1527	.707
1840	1600	4940	1259	.410	5130	1307	.460	5470	1395	.560	5790	1475	.656	6090	1552	.750
1960	1700	5100	1300	.463	5300	1350	.520	5620	1432	.605	5910	1500	.700	6210	1581	.800
2070	1800	5260	1340	.503	5430	1386	.550	5740	1463	.642	6040	1540	.760	6310	1610	.850
2190	1900	5440	1380	.550	5600	1428	.600	5900	1502	.710	6200	1580	.820	6460	1647	.930
2300	2000	5610	1430	.600	5760	1468	.650	6040	1540	.770	6340	1617	.873	6590	1680	.990
2540	2200	5940	1510	.718	6080	1550	.780	6310	1635	.900	6650	1695	1.02	6890	1757	1.12
2760	2400	6260	1594	.852	6400	1630	.910	6690	1706	1.03	6950	1772	1.14	7190	1831	1.28
3000	2600	6650	1692	1.01	6750	1720	1.08	7050	1798	1.21	7300	1860	1.33	7540	1920	1.46
3220	2800	6970	1775	1.17	7110	1810	1.24	7390	1881	1.40	7610	1940	1.53	7850	2000	1.66
3450	3000	7350	1870	1.37	7460	1900	1.44	7720	1970	1.62	7960	2030	1.75	8200	2090	1.90
3690	3200	7730	1968	1.59	7850	1998	1.66	8080	2057	1.83	8310	2120	1.99	5550	2180	2.18
3920	3400	8100	2063	1.84	8130	2072	1.92	8450	2153	2.08	8670	2205	2.24	8900	2270	2.41
4150	3600	8480	2160	2.11	8600	2188	2.20	8820	2245	2.36	9030	2300	2.54	9180	2340	2.72
Cfm	OUTLET VELOCITY	2"STATIC			2 1-4"STATIC			2 1/2"STATIC			2 3/4"STATIC			3"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1730	1500	6300	1605	.81	6300	1680	.900	6940	1755	1.01	7180	1830	1.10	7470	1905	1.23
1840	1600	6400	1630	.86	6670	1700	.950	6990	1780	1.06	7260	1850	1.16	7530	1920	1.30
1960	1700	6490	1655	.92	6880	1730	1.03	7060	1800	1.13	7340	1870	1.22	7590	1935	1.37
2070	1800	6600	1680	.97	6880	1750	1.07	7160	1823	1.20	7410	1890	1.30	7690	1960	1.43
2190	1900	6750	1720	1.04	7000	1785	1.14	7260	1850	1.27	7520	1916	1.34	7780	1982	1.52
2300	2000	6860	1750	1.10	7120	1815	1.21	7370	1880	1.35	7610	1940	1.46	7890	2010	1.60
2540	2200	7160	1825	1.24	7380	1880	1.31	7650	1950	1.50	7890	2010	1.65	8100	2062	1.80
2760	2400	7430	1895	1.40	7650	1952	1.56	8000	2040	1.70	8110	2070	1.85	8350	2130	2.00
3000	2600	7770	1980	1.61	7960	2030	1.76	8200	2090	1.90	8390	2140	2.05	8630	2200	2.22
3220	2800	8090	2060	1.82	8270	2110	1.96	8490	2160	2.10	8670	2210	2.27	8900	2270	2.44
3450	3000	8390	2140	2.07	8600	2190	2.19	8790	2240	2.35	9020	2300	2.50	9210	2350	2.67
3690	3200	8790	2240	2.42	8950	2280	2.45	9160	2330	2.64	9330	2380	2.82	9490	2420	2.95
3920	3400	9150	2330	2.65	9300	2370	2.80	9500	2420	2.95	9650	2460	3.13	9730	2480	3.27
4150	3600	9450	2410	2.91	9650	2460	3.07	9850	2510	3.25	10000	2550	3.45	10200	2600	3.60
4380	3800	9770	2488	3.22	10000	2550	3.37	10400	2600	3.62	10350	2640	3.80	10500	2680	3.98
4610	4000	10120	2580	3.60	10550	2620	3.78	10500	2680	4.02	10700	2730	4.22	10900	2780	4.30
4840	4200	10500	2675	4.00	10650	2715	4.18	10860	2770	4.45	11050	2820	4.65	11200	2860	4.85
5060	4400	10830	2760	4.41	11020	2810	4.63	11200	2850	4.85	11350	2900	5.12	11520	2940	5.32
5300	4600	11220	2860	4.88	11400	2905	5.13	11550	2945	5.35	11750	3000	5.63	11800	3010	5.87
5530	4800	11600	2955	5.40	11750	2995	5.63	11930	3040	5.86	12100	3080	6.13	12270	3130	6.40
5760	5000	11970	3050	5.94	12120	3090	6.16	12280	3130	6.40	12430	3170	6.65	12580	3210	6.97

Figures below heavy line indicate that fans running at 7500 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-35 BELTED CENTRIFUGAL FAN

WHEEL DIA 18 1/4" OUTLET AREA 1.715 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
858	500	2350	490	.048	2750	572	.073	3105	647	.103	3370	702	.128	3700	770	.164
1030	600	2520	525	.058	2875	599	.087	3210	668	.113	3460	720	.151	3750	781	.176
1200	700	2690	560	.072	3000	624	.098	3330	694	.135	3560	741	.165	3840	800	.200
1370	800	2880	600	.088	3205	667	.120	3510	730	.157	3690	769	.184	3960	825	.227
1540	900	3070	640	.105	3370	702	.140	3670	763	.18	3905	814	.217	4120	858	.257
1715	1000	3265	680	.132	3575	744	.167	3930	817	.219	4070	849	.247	4280	893	.288
1885	1100	3500	730	.159	3760	782	.194	4050	843	.241	4320	898	.294	4480	933	.329
2060	1200	3695	770	.192	3960	823	.226	4270	887	.282	4440	925	.319	4650	969	.366
2230	1300	3935	820	.227	4170	869	.264	4430	924	.318	4630	963	.361	4840	1009	.414
2400	1400	4180	870	.275	4410	918	.312	4550	948	.347	4800	1002	.408	5035	1048	.463
2570	1500	4320	900	.302	4620	962	.356	4800	1001	.418	4980	1038	.451	5260	1093	.528
2740	1600	4610	960	.359	4850	1010	.426	5040	1050	.500	5220	1088	.522	5440	1132	.585
2910	1700	4820	1005	.417	5050	1052	.482	5280	1100	.542	5440	1132	.602	5610	1168	.648
3080	1800	5150	1080	.575	5400	1135	.595	5610	1142	.608	5660	1178	.673	5780	1202	.702
3260	1900	5400	1130	.595	5630	1180	.680	5810	1227	.71	5870	1220	.752	6040	1258	.810
3430	2000	5630	1180	.680	5860	1230	.770	6075	1270	.85	6220	1268	.842	6260	1303	.897
3770	2200	6150	1290	.875	6380	1340	.990	6500	1365	1.040	6640	1360	1.042	6720	1400	1.135
4120	2400	6640	1390	1.110	6850	1430	1.200	7000	1470	1.310	7095	1495	1.390	7120	1482	1.342
4450	2600	7090	1485	1.350	7290	1530	1.460	7430	1560	1.560	7600	1600	1.660	7560	1572	1.602

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1715	1000	4530	942	.337	4690	977	.378	5100	1062	.486	5430	1135	.572	5820	1215	.740
1885	1100	4670	973	.364	4880	1015	.423	5250	1092	.523	5570	1161	.636	5970	1246	.800
2060	1200	4830	1008	.413	5070	1053	.473	5420	1128	.580	5710	1192	.663	6110	1273	.858
2230	1300	5070	1057	.475	5260	1094	.532	5600	1167	.642	5880	1229	.750	6270	1308	.924
2400	1400	5210	1084	.516	5400	1125	.577	5740	1196	.690	6020	1258	.810	6440	1342	1.007
2570	1500	5400	1125	.576	5580	1162	.642	5920	1232	.762	6210	1298	.882	6620	1380	1.090
2740	1600	5590	1163	.639	5770	1201	.702	6120	1273	.833	6400	1335	.966	6800	1418	1.185
2910	1700	5790	1207	.708	5960	1240	.774	6300	1311	.912	6570	1370	1.045	7000	1460	1.300
3080	1800	5980	1246	.786	6160	1281	.852	6475	1349	.996	6770	1412	1.140	7200	1500	1.398
3260	1900	6200	1290	.867	6350	1321	.936	6650	1384	1.068	6950	1450	1.242	7360	1535	1.492
3430	2000	6410	1335	.966	6550	1366	1.03	7180	1497	1.356	7113	1489	1.335	7600	1583	1.620
3770	2200	7000	1470	1.300	7000	1459	1.26	7270	1515	1.410	7370	1536	1.550	8000	1668	1.918
4120	2400	7430	1560	1.560	7430	1547	1.5	7680	1598	1.650	7920	1651	1.828	8420	1755	2.210
4450	2600	7900	1655	1.860	8010	1680	1.94	8130	1691	1.960	8420	1735	2.110	8830	1842	2.600
4800	2800	8310	1750	2.200	8500	1780	2.33	8530	1776	2.270	8780	1830	2.470	9260	1930	2.970
5140	3000	8800	1850	2.580	9000	1880	2.72	9200	1930	2.970	9200	1918	2.820	9670	2018	3.400
5480	3200	9370	1950	3.060	9400	1970	3.30	9620	2020	3.430	9620	2005	3.270	10100	2105	3.890
5830	3400	9840	2060	3.250	9900	2070	3.67	10060	2120	3.900	10400	2170	4.200	10600	2210	4.430
6170	3600	10250	2150	4.080	10400	2180	4.25	10600	2220	4.500	10800	2270	4.750	11000	2298	5.020

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2570	1500	6880	1437	1.230	7070	1478	1.335	7390	1542	1.540	7640	1595	1.680	7860	1640	1.820
2740	1600	7060	1472	1.355	7320	1528	1.465	7570	1580	1.640	7810	1630	1.790	8020	1675	1.950
2910	1700	7260	1517	1.430	7520	1570	1.625	7730	1615	1.735	7990	1668	1.920	8195	1710	2.080
3080	1800	7420	1550	1.560	7700	1607	1.720	7950	1659	1.885	8140	1700	2.050	8360	1745	2.220
3260	1900	7640	1594	1.690	7870	1642	1.820	8120	1693	2.020	8320	1737	2.170	8560	1788	2.350
3430	2000	7840	1638	1.820	8070	1685	1.980	8280	1728	2.145	8550	1785	2.330	8720	1820	2.520
3770	2200	8220	1718	2.115	8390	1750	2.280	8650	1805	2.470	8910	1860	2.660	9150	1910	2.870
4120	2400	8650	1805	2.440	8820	1840	2.600	8980	1876	2.860	9280	1938	3.020	9480	1980	3.220
4450	2600	9020	1882	2.790	9230	1928	2.990	9430	1970	3.180	9660	2019	3.420	9870	2060	3.620
4800	2800	9450	1970	3.170	9640	2015	3.420	9870	2060	3.640	10090	2105	3.910	10350	2160	4.130
5140	3000	9880	2070	3.650	10050	2105	3.870	10300	2150	4.120	10490	2190	4.330	10660	2225	4.630
5480	3200	10300	2160	4.150	10450	2190	4.400	10700	2235	4.600	10930	2280	4.880	11080	2315	5.180
5830	3400	10700	2250	4.700	11000	2300	5.020	11160	2330	5.220	11320	2365	5.520	11570	2410	5.820
6170	3600	11200	2350	5.300	11420	2390	5.650	11580	2415	5.900	11820	2470	6.250	11980	2500	6.500
6500	3800	11650	2430	5.900	11850	2480	6.250	12000	2510	6.520	12270	2560	6.840	12350	2580	7.130
6850	4000	12150	2540	6.700	12260	2560	7.000	12420	2600	7.300	12700	2650	7.700	12810	2675	7.980
7200	4200	12600	2640	7.500	12700	2650	7.700	12950	2700	8.100	13100	2740	8.400	13220	2760	8.820
7550	4400	13000	2720	8.500	13200	2760	8.650	13450	2810	9.100	13580	2840	9.400	13720	2865	9.750
7900	4600	13550	2830	9.300	13700	2860	9.700	13860	2900	9.900	14050	2930	10.30	14180	2960	10.750
8200	4800	13600	2850	9.600	13800	2870	9.85	13950	2920	10.3	14100	2940	10.5	14200	2980	11.0
8550	5000	14000	2940	10.5	14100	2960	10.9	14300	3000	11.2	14400	3020	11.4	14600	3060	11.9

Figures below heavy line indicate that fans running at 7500 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-40 BELTED CENTRIFUGAL FAN

WHEEL DIA 21" OUTLET AREA 2.29 SQUARE FEET SINGLE WIDTH. SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1143	500	2385	433	.068	2750	500	.103	3065	558	.146	3390	617	.194	3690	671	.254
1373	600	2560	465	.086	2885	524	.121	3180	579	.163	3480	633	.211	3740	681	.267
1602	700	2750	500	.107	3065	557	.146	3350	610	.189	3600	655	.237	3850	701	.293
1832	800	2960	538	.129	3250	592	.172	3520	640	.224	3770	686	.271	3990	727	.322
2060	900	3150	572	.159	3460	630	.211	3710	675	.258	3940	717	.310	4180	762	.370
2290	1000	3360	610	.193	3630	661	.241	3900	710	.301	4150	755	.357	4330	789	.417
2520	1100	3570	648	.227	3890	709	.297	4100	747	.349	4390	790	.413	4540	826	.473
2750	1200	3810	691	.278	4060	739	.335	4300	783	.400	4730	824	.469	4730	861	.537
2980	1300	4030	732	.326	4280	780	.396	4520	823	.465	4730	862	.528	4940	900	.610
3210	1400	4230	770	.385	4480	816	.460	4700	856	.528	4930	896	.602	5140	935	.689
3440	1500	4480	815	.450	4700	856	.528	4860	885	.610	5150	938	.689	5320	968	.762
3665	1600	4690	853	.520	4920	895	.600	5170	938	.683	5370	976	.775	5540	1010	.852
3895	1700	4940	900	.610	5150	937	.700	5400	983	.795	5580	1015	1.87	5750	1048	.962
4130	1800	5150	940	.695	5400	985	.790	5610	1020	.900	5800	1053	.98	5950	1083	1.035
4360	1900	5400	985	.790	5630	1025	.910	5810	1055	.990	6010	1092	1.060	6180	1126	1.145
4580	2000	5630	1025	.910	5860	1065	1.030	6075	1100	1.300	6230	1133	1.185	6410	1168	1.280
5040	2200	6150	1120	1.170	6380	1160	1.310	6500	1180	1.590	6640	1210	1.500	6850	1249	1.55
5500	2400	6640	1210	1.480	6850	1240	1.600	7000	1270	1.750	7095	1295	1.850	7390	1328	1.875
5960	2600	7090	1290	1.800	7290	1325	1.940	7430	1350	2.080	7600	1380	2.220	7750	1412	2.25

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2290	1000	4550	828	.472	4720	859	.537	5110	930	.675	5380	979	.825	5820	1059	.980
2520	1100	4730	861	.537	4920	895	.602	5270	960	.740	5660	1029	.900	5970	1083	1.025
2750	1200	4930	896	.602	5110	930	.667	5450	992	.818	5770	1050	.967	6100	1109	1.100
2980	1300	5130	934	.675	5300	965	.752	5630	1023	.905	5970	1084	1.03	6250	1138	1.185
3210	1400	5320	967	.762	5490	1000	.835	5830	1061	.990	6180	1124	1.115	6420	1168	1.290
3440	1500	5490	1000	.840	5690	1038	.925	6050	1100	1.06	6350	1153	1.22	6600	1200	1.40
3665	1600	5710	1040	.945	5880	1072	1.02	6230	1135	1.185	6500	1182	1.35	6790	1234	1.52
3895	1700	5920	1080	1.015	6140	1115	1.11	6400	1163	1.278	6720	1221	1.475	6980	1270	1.670
4130	1800	6140	1120	1.125	6390	1162	1.25	6610	1201	1.405	6900	1252	1.58	7180	1306	1.79
4360	1900	6330	1154	1.240	6510	1183	1.335	6810	1238	1.525	7100	1290	1.75	7340	1337	1.92
4580	2000	6550	1193	1.375	6720	1222	1.475	7020	1278	1.71	7320	1331	1.92	7570	1378	2.08
5040	2200	7000	1270	1.720	7180	1307	1.790	7450	1355	2.00	7720	1403	2.25	7980	1450	2.46
5500	2400	7430	1350	2.080	7620	1383	2.170	7860	1429	2.38	8140	1480	2.63	8400	1528	2.83
5960	2600	7900	1435	2.480	8010	1455	2.600	8300	1510	2.79	8550	1557	3.05	8800	1600	3.33
6420	2800	8310	1515	2.930	8500	1545	3.100	8720	1586	3.25	8980	1632	3.54	9220	1678	3.82
6870	3000	8800	1600	3.420	9000	1630	3.620	9200	1675	3.95	9480	1708	4.05	9650	1755	4.37
7330	3200	9370	1690	4.080	9400	1700	4.400	9620	1750	4.57	9900	1800	4.72	10100	1830	5.00
7790	3400	9840	1780	4.320	9900	1800	4.870	10060	1840	5.20	10400	1880	5.60	10580	1920	5.72
8250	3600	10250	1865	5.45	10400	1890	5.650	10600	1925	6.00	10800	1960	6.35	11000	2000	6.43

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
3440	1500	6880	1252	1.60	7060	1283	1.71	7400	1343	1.98	7640	1390	2.15	7860	1428	2.33
3665	1600	7060	1282	1.71	7300	1328	1.88	7560	1373	2.09	7820	1420	2.29	8020	1458	2.50
3895	1700	7260	1320	1.84	7520	1366	2.08	7720	1403	2.23	7970	1450	2.46	8180	1489	2.67
4130	1800	7420	1350	2.00	7680	1398	2.21	7920	1442	2.42	8150	1481	2.62	8360	1520	2.83
4360	1900	7630	1388	2.17	7830	1427	2.33	8100	1472	2.58	8320	1512	2.77	8570	1558	3.00
4580	2000	7860	1428	2.33	8060	1466	2.55	8270	1503	2.75	8520	1550	3.00	8730	1588	3.23
5040	2200	8230	1496	2.71	8400	1528	2.92	8700	1581	3.17	8900	1619	3.42	9150	1664	3.67
5500	2400	8650	1572	3.13	8820	1602	3.34	9050	1649	3.67	9270	1688	3.88	9490	1725	4.13
5960	2600	9020	1640	3.58	9230	1680	3.83	9460	1720	4.08	9650	1756	4.38	9870	1793	4.63
6420	2800	9460	1720	4.17	9650	1756	4.38	9870	1795	4.63	10100	1831	5.00	10350	1878	5.06
6870	3000	9880	1800	4.85	10100	1831	4.95	10300	1870	5.30	10510	1909	5.54	10680	1940	5.92
7330	3200	10300	1875	5.50	10510	1910	5.63	10730	1949	5.92	10920	1983	6.25	11100	2015	6.66
7790	3400	10700	1950	6.25	11000	1995	6.70	11180	2030	6.70	11350	2060	7.10	11560	2100	7.45
8250	3600	11200	2030	7.10	11420	2070	7.50	11680	2120	7.60	11850	2150	8.00	11970	2175	8.33
8710	3800	11650	2110	7.90	11850	2150	8.30	12000	2180	8.70	12270	2230	8.75	12370	2245	9.15
9170	4000	12150	2200	8.90	12260	2220	9.30	12420	2250	9.70	12700	2305	9.80	12850	2330	10.2
9620	4200	12600	2280	10.0	12700	2300	10.20	12950	2350	10.80	13100	2370	11.20	13220	2405	11.3
10080	4400	13000	2360	11.40	13200	2390	11.50	13450	2440	12.10	13580	2460	12.50	13730	2497	12.5
10520	4600	13550	2450	12.30	13700	2480	12.80	13860	2510	13.20	14050	2540	13.70	14200	2580	13.8

Figures below heavy line indicate that fans running at 7500 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-45 BELTED CENTRIFUGAL FAN

WHEEL DIA 23 3/4" OUTLET AREA 2.95 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1475	500	2380	383	.088	2750	442	.134	3070	493	.187	3390	545	.247	3680	593	.324
1770	600	2560	411	.112	2880	463	.156	3180	512	.209	3480	560	.270	3740	602	.340
2065	700	2750	442	.140	3060	492	.190	3350	540	.242	3600	580	.302	3850	620	.374
2360	800	2960	475	.167	3250	523	.225	3520	566	.286	3770	606	.346	4000	642	.415
2650	900	3150	506	.206	3460	556	.275	3720	598	.330	3940	633	.396	4190	675	.475
2950	1000	3350	540	.250	3640	585	.310	3900	628	.385	4150	667	.465	4340	698	.535
3245	1100	3560	573	.295	3900	626	.385	4100	660	.445	4340	698	.528	4540	730	.605
3540	1200	3800	610	.360	4060	654	.435	4300	690	.515	4520	728	.600	4730	760	.690
3835	1300	4020	646	.425	4280	689	.515	4250	728	.595	4730	760	.680	4950	795	.780
4130	1400	4230	676	.490	4500	723	.600	4700	757	.680	4930	792	.770	5130	825	.880
4425	1500	4480	716	.575	4700	757	.685	4860	782	.780	5150	828	.880	5320	855	.975
4720	1600	4690	750	.670	4920	785	.770	5150	830	.880	5360	862	.990	5550	892	1.08
5015	1700	4940	790	.780	5150	825	.890	5400	870	1.02	5570	896	1.11	5750	925	1.23
5310	1800	5150	825	.890	5400	865	1.010	5610	902	1.15	6780	930	1.25	5950	957	1.36
5600	1900	5400	865	1.010	5630	900	1.160	5810	930	1.26	6000	964	1.40	6180	992	1.52
5900	2000	5630	900	1.160	5860	937	1.320	6075	975	1.44	6220	1000	1.56	6400	1030	1.69
6490	2200	6150	985	1.490	6380	1025	1.680	6500	1045	1.77	6640	1065	1.92	6850	1100	2.07
7070	2400	6640	1060	1.900	6850	1100	2.050	7000	1125	2.23	7095	1140	2.37	7290	1170	2.48
7670	2600	7090	1135	2.300	7290	1170	2.500	7430	1190	2.07	7600	1215	2.85	7750	1245	2.97

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2950	1000	4550	731	.61	4710	758	.69	5110	822	.87	5460	879	1.06	5800	933	1.25
3245	1100	4730	760	.69	4920	790	.77	5280	848	.95	5630	908	1.15	5950	958	1.36
3540	1200	4930	791	.77	5110	822	.85	5450	875	1.05	5760	928	1.23	6080	978	1.45
3835	1300	5130	825	.87	5300	850	.96	5610	900	1.15	5950	958	1.36	6240	1005	1.56
4130	1400	5320	855	.98	5500	885	1.07	5820	935	1.27	6120	985	1.47	6400	1030	1.70
4425	1500	5500	885	1.07	5700	915	1.18	6030	970	1.40	6320	1020	1.61	6580	1060	1.85
4720	1600	5700	918	1.21	5880	945	1.30	6230	1000	1.56	6500	1045	1.78	6770	1090	2.00
5015	1700	5920	952	1.34	6120	985	1.46	6380	1025	1.68	6700	1080	1.95	6980	1120	2.20
5310	1800	6140	988	1.48	6360	1025	1.65	6600	1060	1.85	6870	1105	2.09	7160	1150	2.36
5600	1900	6330	1020	1.63	6500	1045	1.76	6780	1090	2.01	7080	1140	2.31	7330	1180	2.53
5900	2000	6550	1050	1.82	6700	1080	1.95	7000	1130	2.25	7310	1175	2.53	7550	1215	2.75
6490	2200	7000	1120	2.20	7160	1150	2.36	7430	1195	2.64	7700	1240	2.97	7950	1280	3.24
7070	2400	7430	1190	2.66	7600	1220	2.86	7830	1260	3.14	8120	1310	3.46	8380	1350	3.74
7670	2600	7900	1265	3.18	8010	1285	3.30	8270	1330	3.68	8550	1375	4.00	8800	1415	4.40
8250	2800	8310	1340	3.75	8500	1365	3.97	8750	1400	4.30	8950	1440	4.70	9200	1480	5.03
8740	3000	8800	1415	4.40	9000	1440	4.65	9200	1480	5.05	9380	1510	5.35	9630	1550	5.80
9430	3200	9370	1495	5.20	9400	1510	5.60	9620	1550	5.85	9880	1590	6.20	10050	1620	6.60
10000	3400	9840	1575	5.50	9900	1590	6.25	10060	1630	6.70	10400	1660	7.72	10550	1700	7.55
10620	3600	10250	1650	6.95	10400	1670	7.25	10600	1740	7.70	10800	1740	8.10	10950	1765	8.50

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
4425	1500	6860	1100	2.08	7050	1130	2.26	7370	1185	2.61	7620	1225	2.84	7820	1260	3.08
4720	1600	7040	1130	2.26	7290	1170	2.48	7540	1210	2.78	7780	1250	3.03	8000	1285	3.30
5015	1700	7250	1165	2.42	7500	1200	2.75	7700	1240	2.96	7950	1280	3.25	8160	1310	3.52
5310	1800	7410	1190	2.64	7660	1230	2.92	7900	1270	3.20	8120	1305	3.47	8340	1340	3.72
5600	1900	7620	1225	2.86	7820	1260	3.08	8080	1300	3.40	8300	1330	3.66	8550	1375	3.96
5900	2000	7830	1260	3.08	8050	1290	3.35	8250	1325	3.65	8500	1370	3.96	8700	1400	4.26
6490	2200	8200	1320	3.58	8380	1345	3.85	8620	1380	4.17	8800	1430	4.50	9130	1470	4.85
7070	2400	8620	1390	4.13	8800	1415	4.40	9050	1455	4.85	9250	1490	5.10	9450	1520	5.45
7670	2600	9000	1450	4.73	9200	1480	5.07	9420	1515	5.40	9620	1550	5.77	9850	1580	6.10
8250	2800	9420	1515	5.35	9620	1550	5.77	9850	1580	6.15	10050	1615	6.60	10300	1655	7.00
8740	3000	9880	1590	6.25	10050	1620	6.55	10250	1650	7.00	10450	1685	7.30	10650	1710	7.80
9430	3200	10300	1655	7.10	10450	1685	7.40	10700	1720	7.80	10900	1750	8.25	11050	1780	8.75
10000	3400	10700	1725	8.00	11000	1760	8.55	11150	1790	8.85	11300	1820	9.35	11500	1850	7.85
10620	3600	11200	1795	9.05	11420	1830	9.60	11600	1860	10.0	11800	1900	10.6	11900	1920	11.0
11420	3800	11650	1865	11.0	11850	1900	10.60	12000	1925	11.1	12200	1970	11.5	12300	1980	12.0
11800	4000	12150	1945	11.4	12260	1965	11.90	12420	1990	12.4	12650	2030	13.0	12750	2050	13.5
12400	4200	12600	2020	12.8	12700	2030	13.10	12950	2070	13.8	13100	2100	14.3	13200	2120	15.0
12990	4400	13000	2090	14.6	13200	2110	14.70	13450	2150	15.5	13580	2170	15.9	13700	2200	16.5
13580	4600	13550	2170	15.8	13700	2190	16.40	13860	2220	16.8	14050	2250	17.6	14150	2275	18.2

Figures below heavy line indicate that fans running at 7500 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-50 BELTED CENTRIFUGAL FAN

WHEEL DIA. 26.5" OUTLET AREA 3.7 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1850	500	2380	343	.11	2750	396	.17	3070	441	.24	3390	489	.31	3680	530	.41
2220	600	2550	368	.14	2880	415	.20	3180	458	.26	3480	500	.34	3740	540	.43
2590	700	2750	396	.17	3060	440	.24	3350	482	.30	3600	520	.38	3850	555	.47
2960	800	2960	426	.21	3250	468	.28	3520	507	.36	3770	543	.44	4000	575	.52
3330	900	3150	454	.26	3460	498	.34	3720	535	.42	3940	567	.50	4190	604	.60
3700	1000	3360	483	.31	3640	524	.39	3900	562	.49	4150	597	.57	4340	625	.67
4070	1100	3560	513	.37	3900	560	.48	4100	590	.56	4340	625	.66	4540	655	.76
4450	1200	3800	548	.45	4060	585	.54	4300	620	.64	4520	651	.75	4730	682	.86
4810	1300	4020	580	.53	4280	616	.64	4520	652	.75	4730	682	.85	4950	712	.98
5180	1400	4230	610	.61	4500	646	.74	4700	678	.85	4930	710	.97	5130	740	1.10
5550	1500	4480	646	.71	4700	678	.85	4860	700	.98	5150	742	1.10	5320	765	1.22
5920	1600	4690	677	.83	4920	710	.96	5150	742	1.10	5360	772	1.24	5550	800	1.37
6300	1700	4940	713	.97	5150	743	1.10	5400	779	1.28	5570	802	1.40	5750	830	1.55
6660	1800	5150	745	1.10	5400	780	1.26	5610	810	1.43	5780	832	1.58	5950	857	1.71
7040	1900	5400	780	1.26	5630	812	1.44	5810	835	1.57	6000	863	1.75	6180	890	1.90
7400	2000	5630	813	1.44	5860	845	1.64	6075	873	1.79	6220	895	1.96	6400	923	2.12
8150	2200	6150	885	1.85	6380	920	2.10	6500	937	2.20	6640	960	2.38	6850	985	2.58
8900	2400	6640	960	2.35	6850	985	2.55	7000	1010	2.77	7095	1025	2.95	7290	1050	3.10
9620	2600	7090	1020	2.87	7290	1050	3.10	7430	1070	3.22	7600	1095	3.52	7750	1115	3.70

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
3700	1000	4550	656	.76	4710	680	.86	5110	737	1.08	5460	788	1.33	5800	836	1.57
4070	1100	4730	682	.86	4920	710	.97	5280	760	1.19	5630	813	1.44	5950	857	1.71
4450	1200	4930	710	.97	5110	736	1.07	5450	785	1.31	5760	832	1.55	6080	876	1.82
4810	1300	5130	739	1.08	5300	765	1.21	5610	810	1.45	5950	860	1.71	6240	900	1.96
5180	1400	5320	766	1.22	5500	791	1.34	5820	840	1.59	6120	882	1.85	6400	925	2.14
5550	1500	5500	792	1.35	5700	820	1.49	6030	870	1.75	6320	913	2.03	6580	950	2.32
5920	1600	5700	822	1.52	5880	848	1.64	6230	900	1.96	6500	935	2.23	6770	976	2.52
6300	1700	5920	854	1.68	6120	880	1.84	6380	920	2.11	6700	968	2.44	6980	1000	2.76
6660	1800	6140	885	1.87	6360	918	2.07	6600	953	2.33	6870	990	2.62	7160	1030	2.97
7040	1900	6330	912	2.05	6500	935	2.21	6780	980	2.53	7080	1020	2.90	7330	1055	3.18
7400	2000	6550	945	2.28	6700	965	2.44	7000	1001	2.94	7310	1050	3.18	7550	1090	3.45
8150	2200	7000	1015	2.75	7160	1030	2.97	7430	1070	3.31	7700	1110	3.73	7950	1145	4.07
8900	2400	7430	1080	3.30	7600	1090	3.60	7830	1130	3.94	8120	1170	4.35	8380	1205	4.70
9620	2600	7900	1145	3.95	8010	1155	4.10	8270	1190	4.62	8550	1230	5.05	8800	1270	5.50
10350	2800	8310	1210	4.65	8500	1225	4.95	8750	1260	5.40	8950	1290	5.87	9200	1330	6.30
11100	3000	8800	1270	5.45	9000	1290	5.75	9200	1330	6.30	9380	1350	6.70	9630	1390	7.25
11850	3200	9370	1340	6.50	9400	1350	7.00	9620	1390	7.30	9880	1420	7.80	10050	1450	8.30
12600	3400	9840	1410	6.85	9900	1425	7.75	10060	1460	8.30	10400	1490	8.90	10550	1520	9.45
13300	3600	10250	1480	8.65	10400	1500	9.00	10600	1530	9.50	10800	1560	10.10	10950	1580	10.7

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
5550	1500	6860	990	2.61	7050	1015	2.83	7370	1060	3.28	7620	1100	3.55	7820	1130	3.87
5920	1600	7040	1015	2.83	7290	1050	3.11	7540	1085	3.48	7780	1120	3.80	8000	1150	4.15
6300	1700	7250	1045	3.04	7500	1080	3.45	7700	1110	3.72	7950	1150	4.08	8160	1180	4.42
6660	1800	7410	1070	3.31	7660	1105	3.66	7900	1140	4.00	8120	1170	4.35	8340	1200	4.70
7040	1900	7620	1100	3.59	7820	1130	3.87	8080	1165	4.28	8300	1195	4.60	8550	1230	4.97
7400	2000	7830	1130	3.87	8050	1160	4.20	8250	1190	4.55	8500	1225	4.97	8700	1260	5.35
8150	2200	8200	1180	4.50	8380	1210	4.85	8620	1245	5.25	8880	1280	5.65	9130	1320	6.08
8900	2400	8620	1245	5.20	8800	1270	5.50	9050	1300	6.10	9250	1335	6.40	9450	1365	6.85
9620	2600	9000	1300	5.95	9200	1330	6.35	9420	1360	6.75	9620	1390	7.25	9850	1420	7.65
10350	2800	9420	1360	6.75	9620	1390	7.25	9850	1420	7.75	10050	1450	8.30	10300	1485	8.80
11100	3000	9880	1425	7.75	10050	1450	8.20	10250	1480	8.75	10450	1510	9.20	10650	1535	9.80
11850	3200	10300	1485	8.80	10450	1510	9.35	10700	1540	9.80	10900	1570	10.4	11050	1595	11.0
12600	3400	10700	1545	9.90	11000	1580	10.60	11150	1610	11.1	11300	1630	11.8	11500	1660	12.4
13300	3600	11212	1610	11.30	11420	1640	11.90	11600	1670	12.6	11800	1700	13.3	11900	1720	13.8
14100	3800	11650	1670	12.50	11850	1700	13.20	12000	1730	13.9	12200	1760	14.5	12300	1775	15.1
14800	4000	12150	1745	14.20	12260	1760	14.70	12420	1785	15.4	12650	1820	16.3	12750	1840	16.9
15550	4200	12600	1810	15.90	12700	1820	16.20	12950	1860	17.1	13100	1885	17.8	13200	1900	18.7
16300	4400	13000	1870	18.10	13200	1900	18.20	13450	1930	19.2	13580	1950	19.8	13700	1975	20.7
17000	4600	13550	1945	19.60	13700	1970	20.30	13860	1990	21.0	14050	2020	21.8	14150	2040	22.9

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-55 BELTED CENTRIFUGAL FAN

WHEEL DIA 29.25" OUTLET AREA 4.52 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4"STATIC			3/8"STATIC			1/2"STATIC			5/8"STATIC			3/4"STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
2260	500	2380	311	.13	2750	359	.20	3060	400	.28	3400	443	.38	3680	481	.49
2710	600	2550	334	.17	2880	376	.23	3170	415	.32	3480	455	.41	3750	489	.52
3160	700	2750	359	.21	3050	399	.28	3350	438	.37	3600	470	.46	3860	503	.57
3610	800	2950	386	.25	3250	425	.33	3520	460	.44	3760	492	.53	4000	522	.63
4070	900	3140	411	.31	3470	453	.41	3710	485	.50	3950	515	.60	4180	547	.72
4520	1000	3350	438	.38	3630	475	.47	3900	510	.59	4150	541	.70	4350	567	.81
4970	1100	3560	465	.44	3900	510	.58	4100	536	.68	4350	567	.80	4540	593	.92
5420	1200	3800	496	.54	4050	530	.65	4300	562	.78	4520	590	.91	4730	618	1.04
5880	1300	4020	525	.64	4280	560	.77	4510	590	.90	4730	618	1.03	4940	645	1.19
6320	1400	4230	553	.74	4480	586	.89	4700	615	1.03	4930	643	1.17	5130	670	1.34
6780	1500	4480	585	.87	4700	615	1.03	4860	635	1.19	5150	673	1.34	5320	695	1.48
7230	1600	4690	613	1.01	4920	642	1.17	5150	673	1.33	5360	700	1.50	5550	725	1.65
7680	1700	4940	646	1.18	5150	673	1.34	5400	705	1.55	5570	727	1.69	5760	752	1.87
8130	1800	5150	675	1.34	5400	705	1.54	5610	733	1.74	5780	755	1.90	5970	777	2.07
8600	1900	5400	705	1.54	5630	735	1.75	5810	757	1.91	6000	782	2.12	6180	808	2.30
9050	2000	5630	737	1.75	5860	766	1.99	6075	790	2.18	6220	812	2.37	6420	837	2.56
9950	2200	6150	805	2.25	6380	835	2.55	6500	850	2.68	6640	870	2.90	6850	895	3.17
10850	2400	6640	868	2.87	6850	892	3.10	7000	915	3.38	7095	930	3.60	7270	950	3.76
12200	2600	7090	927	3.50	7290	950	3.76	7430	970	4.03	7600	990	4.30	7700	1010	4.50

Cfm	OUTLET VELOCITY	7/8"STATIC			1"STATIC			1 1/4"STATIC			1 1/2"STATIC			1 3/4"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
4520	1000	4550	595	.92	4710	616	1.04	5110	668	1.31	5450	713	1.60	5800	758	1.90
4970	1100	4730	618	1.04	4920	642	1.17	5280	690	1.44	5640	736	1.75	5920	776	2.06
5420	1200	4930	644	1.17	5110	668	1.30	5430	710	1.59	5770	753	1.87	6070	794	2.20
5880	1300	5130	670	1.31	5300	693	1.46	5620	734	1.75	5950	777	2.06	6230	815	2.37
6320	1400	5320	695	1.48	5500	718	1.62	5820	760	1.92	6120	800	2.23	6380	835	2.60
6780	1500	5500	720	1.63	5700	745	1.80	6050	790	2.12	6310	825	2.45	6580	860	2.82
7230	1600	5720	747	1.84	5880	769	1.98	6230	814	2.37	6480	847	2.70	6750	883	3.05
7680	1700	5930	775	2.03	6120	800	2.22	6380	834	2.56	6700	875	2.95	6950	910	3.34
8130	1800	6140	803	2.26	6350	830	2.50	6600	862	2.82	6870	897	3.18	7150	935	3.60
8600	1900	6330	827	2.48	6480	848	2.67	6780	886	3.07	7070	925	3.50	7300	955	3.85
9050	2000	6550	856	2.76	6700	875	2.95	7000	916	3.42	7300	955	3.84	7530	985	4.20
9950	2200	7000	915	3.35	7150	935	3.60	7420	970	4.00	7700	1005	4.50	7960	1040	4.95
10850	2400	7430	975	4.00	7580	990	4.35	7800	1020	4.75	8100	1060	5.25	8400	1095	5.70
12200	2600	7900	1025	4.80	8010	1045	5.00	8250	1080	5.60	8520	1115	6.10	8800	1150	6.70
12650	2800	8310	1090	5.70	8500	1110	6.00	8720	1140	6.50	8950	1170	7.10	9200	1200	7.65
13550	3000	8800	1150	6.65	9000	1170	7.00	9200	1205	7.65	9350	1220	8.10	9650	1260	8.80
14450	3200	9370	1215	7.90	9400	1225	8.50	9620	1260	8.85	9850	1290	9.45	10000	1310	10.0
15350	3400	9840	1280	8.35	9900	1290	9.40	10060	1325	10.10	10400	1350	10.90	10550	1380	11.4
16250	3600	10250	1340	10.50	10400	1360	10.90	10600	1385	11.60	10800	1410	12.30	10950	1430	12.9

Cfm	OUTLET VELOCITY	2"STATIC			2 1/4"STATIC			2 1/2"STATIC			2 3/4"STATIC			3"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
6780	1500	6850	895	3.16	7040	920	3.42	7350	960	3.97	7600	995	4.30	7800	1020	4.70
7230	1600	7020	918	3.42	7260	950	3.75	7530	985	4.20	7760	1015	4.60	7950	1040	5.00
7680	1700	7230	945	3.68	7480	978	4.18	7720	1010	4.50	7950	1040	4.95	8150	1065	5.35
8130	1800	7400	966	4.00	7650	1000	4.45	7880	1030	4.85	8100	1060	5.25	8300	1085	5.70
8600	1900	7600	995	4.35	7800	1020	4.68	8040	1050	5.20	8250	1080	5.55	8530	1115	6.00
9050	2000	7800	1020	4.68	8040	1050	5.10	8220	1075	5.50	8500	1110	6.00	8700	1135	6.50
9950	2200	8200	1070	4.45	8400	1095	5.85	8600	1125	6.35	8870	1160	6.85	9100	1190	7.35
10850	2400	8600	1125	6.25	8800	1150	6.68	9020	1180	7.35	9220	1205	7.80	9450	1235	8.30
12200	2600	9000	1175	7.18	9200	1200	7.70	9400	1230	8.20	9600	1255	8.80	9830	1285	9.30
12650	2800	9400	1230	8.15	9650	1260	8.80	9850	1285	9.35	10000	1310	10.0	10300	1345	10.6
13550	3000	9880	1290	9.40	10000	1310	9.90	10250	1340	10.6	10450	1365	11.1	10650	1390	11.9
14450	3200	10300	1350	10.70	10450	1365	11.3	10650	1395	11.9	10870	1420	12.5	11000	1440	13.3
15350	3400	10700	1400	12.10	11000	1435	12.9	11100	1450	13.5	11300	1475	14.2	11500	1500	15.0
16250	3600	11200	1460	13.70	11420	1490	14.5	11500	1510	15.2	11800	1540	16.0	11900	1560	16.7
17200	3800	11650	1520	15.30	11850	1545	16.0	12000	1565	16.8	12250	1600	17.5	12300	1610	18.3
18100	4000	12156	1580	17.30	12260	1600	17.9	12420	1620	18.8	12600	1650	19.7	12750	1665	20.5
19000	4200	12600	1640	19.30	12700	1655	19.8	12950	1685	20.8	13100	1710	21.5	13200	1725	22.6
19900	4400	13000	1700	22.00	13200	1720	22.3	13450	1750	23.4	13580	1770	24.0	13700	1790	25.0
20800	4600	13550	1760	24.00	13700	1785	24.8	13860	1810	25.5	14050	1830	26.5	14150	1850	27.6

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-60 BELTED CENTRIFUGAL FAN

WHEEL DIA 32" OUTLET AREA 5.43 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
2720	500	2380	284	.16	2750	328	.24	3070	366	.34	3890	405	.45	3680	440	.59
3260	600	2560	305	.20	2880	344	.28	3180	380	.38	3480	415	.49	3740	447	.62
3800	700	2750	328	.25	3060	365	.34	3350	400	.44	3600	430	.55	3850	460	.68
4350	800	2960	353	.30	3250	388	.40	3520	420	.52	3770	450	.63	4000	477	.75
4900	900	3150	376	.37	3460	413	.49	3720	443	.60	3940	470	.72	4190	500	.86
5430	1000	3350	400	.45	3640	434	.56	3900	466	.70	4150	495	.83	4340	518	.97
5980	1100	3560	425	.53	3900	465	.69	4100	490	.81	4340	518	.96	4540	542	1.10
6520	1200	3800	453	.65	4060	485	.78	4300	513	.93	4520	540	1.09	4730	565	1.25
7060	1300	4020	480	.76	4280	511	.92	4520	540	1.08	4730	565	1.23	4950	590	1.42
7600	1400	4230	505	.89	4500	536	1.07	4700	562	1.23	4930	588	1.40	5130	613	1.60
8150	1500	4480	535	1.04	4700	562	1.23	4860	580	1.42	5150	615	1.60	5320	635	1.77
8700	1600	4690	560	1.21	4920	587	1.40	5150	615	1.59	5360	640	1.80	5550	662	1.98
9250	1700	4940	590	1.41	5150	615	1.61	5400	645	1.85	5570	665	2.02	5750	687	2.24
9780	1800	5150	616	1.61	5400	645	1.84	5610	670	2.09	6780	690	2.28	5950	710	2.48
10300	1900	5400	645	1.84	5630	672	2.10	5810	692	2.29	6000	715	2.54	6180	737	2.76
10870	2000	5630	673	2.10	5860	700	2.38	6075	723	2.62	6220	742	2.84	6400	765	3.07
11950	2200	6150	735	2.70	6380	762	3.05	6500	776	3.22	6640	795	3.48	6850	817	3.77
13050	2400	6640	793	3.43	6850	815	3.71	7000	835	4.05	7095	850	4.30	7290	870	4.50
14100	2600	7090	847	4.18	7290	870	4.51	7430	885	4.83	7600	906	5.15	7750	925	5.40

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
5430	1000	4550	543	1.10	4710	563	1.25	5110	610	1.57	5460	652	1.92	5800	693	2.28
5980	1100	4730	565	1.25	4920	587	1.40	5280	630	1.72	5630	673	2.09	5950	710	2.47
6520	1200	4930	588	1.40	5110	610	1.55	5450	650	1.90	5760	688	2.24	6080	726	2.64
7060	1300	5130	612	1.57	5300	633	1.75	5610	670	2.10	5950	710	2.47	6240	745	2.84
7600	1400	5320	635	1.77	5500	656	1.94	5820	695	2.30	6120	730	2.67	6400	765	3.10
8150	1500	5500	657	1.95	5700	680	2.15	6030	720	2.54	6320	755	2.93	6580	786	3.36
8700	1600	5700	682	2.20	5880	702	2.37	6230	744	2.84	6500	775	3.23	6770	808	3.65
9250	1700	5920	707	2.43	6120	730	2.66	6380	762	3.06	6700	800	3.53	6980	832	4.00
9780	1800	6140	733	2.70	6360	760	3.00	6600	788	3.37	6870	820	3.80	7160	855	4.30
10300	1900	6330	756	2.97	6500	775	3.20	6780	810	3.67	7080	845	4.20	7330	875	4.60
10870	2000	6550	782	3.30	6700	800	3.53	7000	837	4.10	7310	873	4.60	7550	902	5.00
11950	2200	7000	835	4.00	7160	855	4.30	7430	888	4.80	7700	920	5.40	7950	950	5.90
13050	2400	7430	888	4.81	7600	906	5.20	7830	935	5.70	8120	970	6.30	8380	1000	6.80
14100	2600	7900	942	5.76	8010	956	6.00	8270	988	6.70	8550	1020	7.30	8800	1050	8.00
15200	2800	8310	995	6.80	8500	1015	7.20	8700	1040	7.80	8950	1070	8.50	9200	1100	9.15
16300	3000	8800	1050	7.95	9000	1070	8.40	9200	1100	9.15	9380	1120	9.70	9630	1150	10.5
17400	3200	9370	1110	9.45	9400	1120	10.20	9620	1150	10.60	9880	1180	11.3	10050	1200	12.0
18500	3400	9840	1170	10.00	9900	1180	11.30	10060	1210	12.10	10400	1235	13.00	10550	1260	13.7
19600	3600	10250	1225	12.60	10400	1240	13.10	10600	1265	13.90	10800	1290	14.70	10950	1310	15.5

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
8150	1500	6860	820	3.78	7050	842	4.10	7370	880	4.75	7620	910	5.15	7820	935	5.60
8700	1600	7040	840	4.10	7290	870	4.50	7540	900	5.05	7780	930	5.50	8000	955	6.00
9250	1700	7250	865	4.40	7500	895	5.00	7700	920	5.37	7950	950	5.90	8160	975	6.40
9780	1800	7410	885	4.80	7660	915	5.30	7900	945	5.80	8120	970	6.30	8340	995	6.80
10300	1900	7620	910	5.20	7820	935	5.60	8080	965	6.20	8300	990	6.65	8550	1020	7.20
10870	2000	7830	935	5.60	8050	960	6.10	8250	985	6.60	8500	1015	7.20	8700	1040	7.75
11950	2200	8200	980	6.50	8380	1000	7.00	8620	1030	7.60	8880	1060	8.20	9130	1090	8.80
13050	2400	8620	1030	7.50	8800	1050	8.00	9050	1080	8.80	9250	1105	9.30	9450	1130	9.90
14100	2600	9000	1075	8.60	9200	1100	9.20	9420	1125	9.80	9620	1150	10.5	9850	1175	11.1
15200	2800	9420	1125	9.75	9620	1150	10.5	9850	1175	11.2	10050	1200	12.0	10300	1230	12.7
16300	3000	9880	1180	11.30	10050	1200	11.9	10250	1225	12.7	10450	1250	13.3	10650	1270	14.2
17400	3200	10300	1230	12.80	10450	1250	13.5	10700	1275	14.2	10900	1300	15.0	11050	1320	15.9
18500	3400	10700	1280	14.50	11000	1310	15.5	11150	1330	16.1	11300	1350	17.0	11500	1375	17.9
19600	3600	11200	1335	16.40	11420	1360	17.4	11600	1380	18.2	11800	1410	19.2	11900	1425	20.0
20600	3800	11650	1385	18.30	11850	1410	19.2	12000	1430	20.2	12200	1460	21.0	12300	1470	21.9
21700	4000	12150	1445	20.70	12260	1460	21.5	12420	1480	22.5	12650	1510	23.6	12750	1525	24.5
22800	4200	12600	1500	23.20	12700	1510	23.7	12950	1540	24.9	13100	1560	25.8	13200	1575	27.1
23900	4400	13000	1550	26.40	13200	1570	26.6	13450	1600	28.0	13580	1615	28.8	13700	1635	30.0
25000	4600	13550	1610	28.60	13700	1630	29.7	13860	1650	30.5	14050	1670	31.8	14150	1690	33.1

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-65 BELTED CENTRIFUGAL FAN

WHEEL DIA. 34.75" OUTLET AREA 6.40 SQUARE FEET SINGLE WIDTH, SINGLE INLET

Cfm	OUTLET VELOCITY	1/4"STATIC			3/8"STATIC			1/2"STATIC			5/8"STATIC			3/4"STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
3200	500	2320	255	.196	2675	294	.297	3020	332	.401	3340	367	.517	3640	400	.641
3840	600	2425	267	.242	2780	306	.361	3110	342	.481	3410	375	.602	3700	407	.745
4480	700	2580	284	.302	2910	320	.421	3210	363	.544	3500	385	.686	3780	416	.834
5120	800	2762	304	.373	3060	337	.494	3440	378	.636	3620	398	.787	3860	425	.936
5760	900	2945	324	.460	3245	357	.588	3510	386	.745	3750	412	.891	4000	440	1.06
6400	1000	3140	345	.577	3420	376	.711	3675	404	.870	3900	429	1.03	4130	454	1.20
7050	1100	3345	368	.681	3610	397	.840	3850	423	1.01	4165	447	1.18	4285	471	1.35
7680	1200	3540	389	.808	3800	418	.980	4050	445	1.18	4250	467	1.35	4450	490	1.55
8320	1300	3760	414	.980	4020	441	1.17	4215	464	1.34	4430	487	1.54	4625	509	1.75
8960	1400	3980	437	1.15	4190	461	1.34	4420	486	1.56	4610	507	1.76	4815	530	1.99
9600	1500	4180	460	1.35	4400	484	1.56	4660	513	1.83	4815	530	2.00	4990	549	2.22
10240	1600	4400	484	1.58	4620	508	1.81	4800	529	2.02	5000	550	2.26	5200	571	2.50
10880	1700	4610	507	1.82	4830	531	2.06	5010	551	2.30	5200	572	2.55	5380	592	2.80
11520	1800	4850	533	2.10	5025	553	2.33	5210	574	2.61	5410	595	2.88	5570	614	3.14
12160	1900	5150	556	2.39	5250	577	2.67	5420	596	2.93	5610	617	3.24	5765	635	3.48
12800	2000	5395	582	2.74	5460	601	3.01	5655	622	3.32	5815	640	3.61	5960	656	3.88
14100	2200	5746	631	3.50	5910	650	3.82	6075	669	4.15	6225	685	4.44	6390	703	4.78
15360	2400	6200	682	4.43	6350	698	4.79	6465	711	5.02	6665	734	5.48	6810	750	5.46
16640	2600	6650	731	5.45	6815	750	5.84	6950	765	6.24	7110	783	6.61	7240	795	6.93

Cfm	OUTLET VELOCITY	7/8"STATIC			1"STATIC			1 1/4"STATIC			1 1/2"STATIC			1 3/4"STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
6400	1000	4340	477	1.38	4565	502	1.57	4920	541	1.97	5350	588	2.37	5710	629	2.81
7050	1100	4500	495	1.55	4700	516	1.74	5085	559	2.16	5450	598	2.57	5800	637	3.04
7680	1200	4650	511	1.74	4830	531	1.93	5215	574	2.38	5550	610	2.81	5895	648	3.28
8320	1300	4820	530	1.96	4990	549	2.15	5350	588	2.61	5670	624	3.06	6010	662	3.67
8960	1400	4995	549	2.19	5160	568	2.41	5510	606	2.89	5820	640	3.36	6110	673	3.85
9600	1500	5185	570	2.48	5350	588	2.70	5670	624	3.17	5970	656	3.60	6260	689	4.17
10240	1600	5275	580	2.75	5540	609	2.99	5840	642	3.64	6100	672	3.99	6420	706	4.54
10880	1700	5550	610	3.05	5710	628	3.31	6010	661	3.95	6300	693	4.36	6600	725	4.94
11520	1800	5745	631	3.41	5910	650	3.69	6200	681	4.19	6490	714	4.77	6740	741	5.32
12160	1900	5950	654	3.78	6090	670	4.05	6375	702	4.63	6665	734	5.22	6920	761	5.18
12800	2000	6125	674	4.16	6275	690	4.48	6560	722	5.07	6840	752	5.66	7100	781	6.26
14100	2200	6490	714	5.08	6685	735	5.26	6965	764	6.03	7125	794	6.72	7450	820	7.36
15360	2400	6950	765	6.08	7000	770	6.24	7350	808	7.18	7600	836	7.90	7840	861	8.62
16640	2600	7360	810	7.32	7525	828	7.81	7560	854	8.53	7980	878	9.23	8250	906	10.09
17900	2800	7900	869	8.62	7940	872	9.15	8175	899	9.98	8390	923	10.73	8625	948	11.64
19200	3000	8200	902	10.29	8390	922	10.88	8575	944	11.58	8815	970	12.50	9010	991	13.39
20500	3200	8690	955	12.12	8800	968	12.55	9030	993	13.49	9225	1015	14.35	9450	1040	15.44
21760	3400	9280	1002	14.00	9225	1015	14.55	9425	1037	15.50	9650	1062	16.58	9810	1080	17.60
23000	3600	9590	1053	16.34	9680	1065	16.88	9855	1085	16.71	10090	1107	18.73	10280	1130	19.91

Cfm	OUTLET VELOCITY	2"STATIC			2 1/4"STATIC			2 1/2"STATIC			2 3/4"STATIC			3"STATUS		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
9600	1500	6560	721	4.72	6850	754	5.30	7100	781	5.84	7380	812	6.46	7650	841	7.11
10240	1600	6795	746	5.10	6965	766	5.66	7245	796	6.31	7500	825	6.82	7750	852	7.50
10880	1700	6850	753	5.47	7100	781	6.05	7360	810	6.71	7615	837	7.35	7860	865	7.97
11520	1800	7000	770	5.95	7275	800	6.67	7510	826	7.15	7755	854	7.95	7925	873	8.21
12160	1900	7155	787	6.35	7410	815	7.05	7655	842	7.65	7875	866	8.32	8100	891	9.00
12800	2000	7350	808	6.93	7575	834	7.50	7895	868	8.18	8050	885	8.88	8270	910	9.61
14100	2200	7700	847	8.10	7925	871	8.73	8145	895	9.43	8360	920	10.15	8570	943	10.89
15360	2400	8150	897	9.35	8300	913	10.09	8500	935	10.80	8725	960	11.56	8910	980	12.30
16640	2600	8455	930	10.82	8650	951	11.63	8850	974	12.30	9060	997	13.20	9255	1020	14.02
17900	2800	8825	970	13.80	9050	995	13.23	9240	1017	14.12	9425	1038	15.00	9610	1059	15.75
19200	3000	9210	1015	14.30	9420	1038	15.19	9610	1059	16.00	9800	1078	16.89	9975	1098	17.75
20500	3200	9625	1060	16.28	9800	1079	17.10	10000	1100	18.23	10210	1123	19.15	10400	1142	20.18
21760	3400	10000	1100	18.42	10220	1125	19.52	10450	1150	20.70	10560	1161	21.25	10750	1182	22.40
23000	3600	10450	1150	20.95	10640	1170	21.90	10800	1188	23.05	11000	1210	24.20	11080	1218	25.20
24300	3800	10875	1195	23.55	11050	1215	24.70	11200	1232	25.61	11375	1250	26.75	11550	1270	28.05
25600	4000	11310	1244	25.65	11480	1262	27.70	11670	1281	29.08	11810	1300	30.05	11950	1315	31.05
26900	4200	11700	1289	29.45	11900	1309	31.00	12020	1322	31.90	12200	1342	31.40	12370	1360	34.42
28200	4400	12200	1342	33.55	12300	1351	34.25	12480	1370	35.45	12650	1390	36.95	12600	1388	37.65
29400	4600	12610	1388	37.10	12800	1405	38.30	12970	1425	39.90	13090	1438	41.00	13220	1455	42.45

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-70 BELTED CENTRIFUGAL FAN

WHEEL DIA. 37 1/2" OUTLET AREA 7.5 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
3750	500	2380	242	.22	2750	280	.33	3060	312	.47	3390	345	.62	3690	375	.81
4500	600	2550	260	.28	2880	294	.39	3180	324	.52	3480	354	.68	3750	382	.85
5250	700	2750	280	.35	3050	311	.47	3360	342	.61	3610	367	.76	3850	392	.94
6000	800	2950	301	.41	3250	331	.55	3520	358	.72	3770	384	.87	4000	407	1.03
6750	900	3150	321	.51	3460	353	.68	3720	378	.83	3930	400	.99	4200	427	1.18
7500	1000	3360	342	.62	3630	370	.77	3910	398	.96	4150	422	1.14	4350	443	1.33
8250	1100	3560	363	.73	3900	397	.95	4110	418	1.11	4340	442	1.32	4550	463	1.52
9000	1200	3800	387	.89	4070	415	1.07	4300	438	1.28	4520	460	1.50	4730	482	1.72
9750	1300	4020	410	1.04	4280	436	1.27	4520	460	1.49	4730	482	1.69	4940	503	1.95
10500	1400	4230	430	1.22	4480	457	1.47	4710	480	1.69	4930	502	1.93	5150	523	2.20
11250	1500	4480	457	1.42	4700	480	1.69	4860	495	1.95	5160	525	2.20	5320	542	2.44
12000	1600	4690	478	1.66	4920	502	1.92	5150	525	2.19	5360	546	2.48	5550	565	2.73
12750	1700	4940	504	1.93	5150	525	2.20	5400	550	2.55	5570	567	2.78	5760	586	3.09
13500	1800	5150	526	2.20	5400	550	2.52	5610	572	2.87	5800	590	3.14	5950	605	3.42
14250	1900	5400	550	2.52	5630	575	2.88	5810	592	3.14	6000	610	3.50	6200	630	3.80
15000	2000	5630	575	2.88	5860	598	3.27	6075	618	3.60	6230	634	3.90	6400	652	4.23
16500	2200	6150	627	3.70	6380	650	4.18	6500	663	4.40	6640	680	4.78	6850	697	5.20
18000	2400	6640	677	4.70	6850	695	5.10	7000	713	5.55	7095	725	5.90	7300	742	6.20
19500	2600	7090	723	5.72	7290	742	6.20	7430	755	6.60	7600	774	7.05	7760	790	7.45

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
7500	1000	4550	464	1.51	4710	480	1.72	5100	520	2.16	5470	557	2.64	5820	592	3.14
8250	1100	4730	482	1.72	4910	500	1.92	5280	538	2.36	5650	575	2.87	5960	606	3.40
9000	1200	4930	502	1.92	5100	520	2.13	5450	555	2.61	5770	587	3.08	6100	620	3.63
9750	1300	5120	522	2.16	5300	540	2.41	5620	572	2.89	5950	605	3.40	6250	635	3.90
10500	1400	5320	542	2.43	5500	560	2.66	5830	593	3.16	6120	622	3.67	6410	652	4.25
11250	1500	5500	560	2.68	5700	580	2.96	6050	615	3.50	6350	645	4.03	6600	671	4.60
12000	1600	5720	582	3.03	5900	600	3.26	6250	635	3.90	6500	661	4.43	6780	690	5.00
12750	1700	5930	603	3.34	6120	622	3.66	6490	650	4.20	6700	683	4.85	6980	710	5.50
13500	1800	6150	625	3.71	6400	650	4.12	6600	672	4.63	6880	700	5.22	7180	730	5.90
14250	1900	6350	646	4.08	6480	660	4.40	6780	690	5.05	7070	720	5.78	7330	746	6.30
15000	2000	6560	668	4.55	6700	682	4.85	7000	715	5.65	7320	745	6.32	7560	770	6.90
16500	2200	7000	713	5.50	7170	730	5.90	7450	758	6.60	7700	785	7.40	7950	810	8.10
18000	2400	7430	760	6.60	7610	775	7.15	7830	798	7.85	8130	828	8.65	8400	855	9.55
19500	2600	7900	805	7.90	8010	816	8.2	8280	843	9.20	8550	870	10.0	8800	895	11.0
21000	2800	8310	850	9.30	8500	867	9.9	8720	887	10.7	8970	912	11.7	9200	938	12.6
22500	3000	8800	900	10.9	9000	915	11.5	9200	940	12.5	9400	955	13.3	9620	980	14.5
24000	3200	9370	950	12.9	9400	956	14.0	9620	982	14.5	9900	1010	15.5	10000	1020	16.5
25500	3400	9840	1000	13.7	9900	1010	15.5	10060	1035	16.6	10400	1055	17.8	10550	1075	18.9
27000	3600	10250	1045	17.2	10400	1060	18.0	10600	1080	19.0	10800	1100	20.2	11000	1120	21.3

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
11250	1500	6880	700	5.20	7050	718	5.65	7370	750	6.50	7620	776	7.10	7830	797	7.70
12000	1600	7030	716	5.65	7300	742	6.20	7540	767	6.90	7800	793	7.60	8000	815	8.25
12750	1700	7250	737	6.05	7500	763	6.90	7700	785	7.40	7950	810	8.10	8150	830	8.80
13500	1800	7400	755	6.60	7660	780	7.30	7910	806	8.00	8120	827	8.70	8330	848	9.35
14250	1900	7630	777	7.15	7830	797	7.70	8070	822	8.50	8300	845	9.15	8550	870	9.90
15000	2000	7840	798	7.70	8030	818	8.40	8250	840	9.10	8500	865	9.90	8720	887	10.6
16500	2200	8210	836	8.95	8380	853	9.60	8630	878	10.4	9000	915	11.3	9150	930	12.1
18000	2400	8620	878	10.3	8800	895	11.0	9050	920	12.1	9250	942	12.7	9500	965	13.6
19500	2600	9000	917	11.8	9220	938	12.6	9430	960	13.5	9650	980	14.4	9830	1000	15.3
21000	2800	9430	960	13.4	9630	980	14.4	9830	1000	15.4	10025	1025	16.5	10300	1050	17.5
22500	3000	9880	1010	15.5	10050	1025	16.3	10250	1045	17.5	10500	1070	18.3	10650	1085	19.5
24000	3200	10300	1050	17.6	10500	1070	18.5	10700	1090	19.5	10900	1110	20.6	11100	1130	21.8
25500	3400	10700	1095	19.8	11000	1120	21.2	11150	1135	22.2	11300	1150	23.3	11550	1175	24.6
27000	3600	11200	1140	22.5	11420	1160	23.8	11600	1180	25.0	11800	1200	26.4	11950	1215	26.5
28500	3800	11650	1180	25.0	11850	1205	26.3	12000	1220	27.6	12300	1250	28.8	12350	1255	30.0
30000	4000	12150	1235	28.5	12260	1245	29.5	12420	1265	30.8	12700	1290	32.4	12800	1300	33.6
31500	4200	12600	1280	32.0	12700	1290	32.5	12950	1315	34.0	13100	1330	35.5	13200	1345	37.2
33000	4400	13000	1325	36.2	13200	1340	36.5	13450	1365	38.5	13580	1380	39.5	13700	1395	41.2
34500	4600	13550	1375	39.1	13700	1390	40.7	13860	1410	41.8	14050	1425	43.5	14150	1440	45.5

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-80 BELTED CENTRIFUGAL FAN

WHEEL DIA. 43" OUTLET AREA 9.9 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
4950	500	2380	212	.29	2740	244	.43	3070	273	.61	3390	301	.81	3680	328	1.06
5950	600	2550	227	.36	2880	256	.50	3180	283	.68	3480	309	.88	3740	333	1.12
6950	700	2740	244	.45	3060	272	.61	3350	298	.79	3600	320	.99	3840	342	1.22
7920	800	2960	263	.54	3250	289	.72	3520	313	.94	3770	335	1.13	4000	355	1.35
8900	900	3150	280	.67	3460	308	.88	3710	330	1.08	3940	350	1.30	4180	372	1.55
9900	1000	3350	298	.81	3640	324	1.00	3900	347	1.26	4150	369	1.50	4350	386	1.75
10900	1100	3550	316	.95	3900	346	1.24	4100	365	1.46	4360	388	1.73	4550	404	1.98
11900	1200	3800	338	1.17	4060	361	1.40	4300	382	1.67	4520	402	1.96	4720	420	2.25
12880	1300	4030	358	1.37	4280	381	1.65	4520	402	1.94	4720	420	2.21	4950	440	2.55
13860	1400	4230	376	1.61	4500	400	1.92	4700	419	2.21	4930	438	2.52	5150	457	2.88
14850	1500	4480	398	1.88	4710	419	2.21	4850	432	2.53	5150	458	2.88	5330	473	3.18
15850	1600	4690	417	2.19	4920	437	2.53	5150	458	2.86	5350	476	3.24	5550	493	3.58
16850	1700	4940	440	2.55	5150	457	2.90	5400	480	3.33	5570	495	3.64	5770	512	4.03
17800	1800	5150	458	2.90	5400	480	3.32	5610	498	3.80	5800	515	4.10	5950	529	4.46
18800	1900	5400	480	3.32	5630	500	3.80	5810	515	4.15	5980	532	4.56	6170	548	4.96
19800	2000	5630	500	3.80	5860	520	4.30	6075	538	4.72	6220	553	5.10	6400	570	5.60
21800	2200	6150	547	4.87	6380	567	5.50	6500	578	5.81	6640	592	6.30	6850	608	6.78
23800	2400	6640	590	6.20	6850	606	6.70	7000	620	7.30	7095	632	7.75	7300	648	8.10
25800	2600	7090	630	7.55	7290	647	8.15	7430	658	8.70	7600	675	9.30	7760	690	9.75

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
9900	1000	4550	405	1.98	4720	420	2.25	5120	455	2.82	5460	486	3.46	5800	516	4.10
10900	1100	4720	420	2.25	4920	437	2.52	5280	470	3.10	5650	502	3.76	5960	530	4.45
11900	1200	4920	437	2.52	5110	455	2.79	5450	485	3.42	5770	513	4.04	6070	540	4.75
12880	1300	5150	457	2.82	5300	472	3.15	5620	500	3.78	5960	530	4.45	6250	555	5.10
13860	1400	5320	473	3.18	5490	488	3.50	5830	518	4.15	6130	545	4.80	6400	570	5.60
14850	1500	5400	480	3.51	5690	506	3.88	6000	535	4.57	6330	563	5.28	6570	585	6.05
15850	1600	5710	508	3.96	5870	523	4.27	6250	555	5.10	6490	577	5.82	5770	602	6.60
16850	1700	5920	527	4.38	6110	544	4.88	6390	568	5.50	6700	596	6.35	6970	620	7.20
17800	1800	6150	546	4.86	6360	566	5.40	6600	587	6.07	6870	611	6.85	7150	636	7.75
18800	1900	6330	563	5.35	6490	577	5.75	6800	604	6.60	7100	630	7.56	7320	652	8.30
19800	2000	6550	583	5.95	6700	595	6.35	7000	623	7.40	7300	650	8.30	7550	672	9.00
21800	2200	7000	622	7.20	7150	636	7.75	7420	660	8.65	7700	685	9.75	7950	707	10.6
23800	2400	7430	660	8.70	7600	675	9.35	7810	695	10.3	8120	722	11.3	8370	745	12.2
25800	2600	7900	702	10.4	8010	711	10.8	8260	735	12.0	8550	760	13.1	8780	782	14.4
27700	2800	8310	740	12.3	8500	755	13.0	8700	775	14.0	9000	800	15.3	9200	820	16.5
29700	3000	8800	780	14.3	9000	795	15.2	9200	820	16.5	9400	835	17.5	9620	857	18.9
31700	3200	9370	825	17.0	9400	835	18.4	9620	855	19.1	9900	880	20.4	10000	893	21.6
33700	3400	9840	870	18.1	9900	880	20.4	10060	900	21.8	10400	920	23.5	10550	940	24.6
35600	3600	10250	910	22.7	10400	925	23.6	10600	940	25.2	10800	960	26.5	10950	975	27.9

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
14850	1500	6850	610	6.80	7050	627	7.40	7350	655	8.55	7600	677	9.3	7800	695	10.1
15850	1600	7020	625	7.40	7270	647	8.10	7520	670	9.10	7770	692	9.9	8000	710	10.8
16850	1700	7250	645	7.90	7490	666	9.00	7700	685	9.70	7950	707	10.6	8150	725	11.5
17800	1800	7400	658	8.70	7650	681	9.60	7900	703	10.5	8100	722	11.4	8300	740	12.2
18800	1900	7610	677	9.40	7810	695	10.1	8060	718	11.2	8260	736	12.0	8550	760	13.0
19800	2000	7810	695	10.0	8100	715	11.0	8230	733	11.9	8500	755	13.0	8700	775	14.0
21800	2200	8200	730	11.7	8380	745	12.6	8610	767	13.7	8900	790	14.8	9100	810	15.8
23800	2400	8620	767	13.5	8800	782	14.4	9050	805	15.9	9300	823	16.8	9450	840	17.8
25800	2600	9000	800	15.5	9200	820	16.6	9400	838	17.7	9600	855	18.9	9830	875	20.0
27700	2800	9400	837	17.5	9610	856	18.9	9820	875	20.2	10000	893	21.6	10250	915	22.8
29700	3000	9880	880	20.4	10050	895	21.4	10250	912	22.9	10400	930	24.0	10600	945	25.6
31700	3200	10300	915	23.1	10450	930	24.3	10700	950	25.6	10900	968	27.0	11000	982	28.6
33700	3400	10700	950	26.2	11000	975	28.0	11100	990	29.0	11250	1000	30.6	11500	1025	32.2
35600	3600	11200	995	29.6	11420	1010	31.5	11550	1030	32.8	11800	1050	34.6	11900	1060	36.0
37600	3800	11650	1030	33.0	11850	1050	34.6	12000	1065	36.3	12250	1090	37.8	12300	1095	39.5
39600	4000	12150	1075	37.5	12260	1085	38.8	12420	1100	40.6	12650	1125	42.5	12700	1135	44.0
41600	4200	12600	1115	41.8	12700	1125	42.8	12950	1145	45.0	13100	1160	46.8	13200	1175	48.8
43500	4400	13000	1152	47.7	13200	1170	48.0	13450	1190	50.3	13580	1200	52.0	13700	1220	54.0
45500	4600	13550	1200	51.5	13700	1210	53.7	13860	1230	55.0	14050	1240	57.5	14150	1260	59.6

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

TYPE BC-90 BELTED CENTRIFUGAL FAN

WHEEL DIA 48.5" OUTLET AREA 12.65 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
6325	500	2380	187	.37	2740	216	.55	3060	241	.78	3390	267	1.04	3680	290	1.36
7600	600	2550	201	.46	2880	227	.65	3190	251	.88	3480	274	1.13	3750	295	1.43
8850	700	2740	216	.58	3060	241	.78	3350	264	1.01	3610	284	1.27	3860	304	1.57
10100	800	2960	233	.69	3250	256	.92	3520	277	1.20	3770	297	1.45	4000	315	1.73
11400	900	3150	248	.85	3470	273	1.13	3720	293	1.38	3940	310	1.66	4190	330	1.98
12650	1000	3350	264	1.04	3630	286	1.29	3910	308	1.61	4150	327	1.91	4350	342	2.23
13900	1100	3560	280	1.22	3900	307	1.59	4100	323	1.86	4350	342	2.20	4550	358	2.53
15200	1200	3800	299	1.50	4070	320	1.80	4310	339	2.14	4520	356	2.50	4730	373	2.88
16500	1300	4030	317	1.75	4280	337	2.12	4520	356	2.48	4730	373	2.83	4930	389	3.27
17700	1400	4230	333	2.05	4500	354	2.46	4710	371	2.83	4920	388	3.22	5150	405	3.68
19000	1500	4480	353	2.40	4711	371	2.83	4870	383	3.27	5150	406	3.68	5330	420	4.07
20300	1600	4690	370	2.76	4920	388	3.22	5150	406	3.66	5360	422	4.15	5550	437	4.55
21500	1700	4940	389	3.25	5150	406	3.70	5410	426	4.25	5570	438	4.65	5750	453	5.15
22800	1800	5150	407	3.70	5400	426	4.25	5610	442	4.80	5780	455	5.25	5950	468	5.70
24100	1900	5400	426	4.22	5630	444	4.85	5810	457	5.25	6000	472	5.85	6190	487	6.35
25400	2000	5630	444	4.82	5860	462	5.50	6075	477	6.00	6220	490	6.55	6410	505	7.07
27900	2200	6150	485	6.20	6380	503	7.00	6500	513	7.40	6640	525	8.00	6850	539	8.68
30400	2400	6640	523	7.90	6850	538	8.50	7000	550	9.30	7095	560	9.90	7290	574	10.4
32900	2600	7090	558	9.60	7290	574	10.4	7430	583	11.10	7600	598	11.8	7750	610	12.4

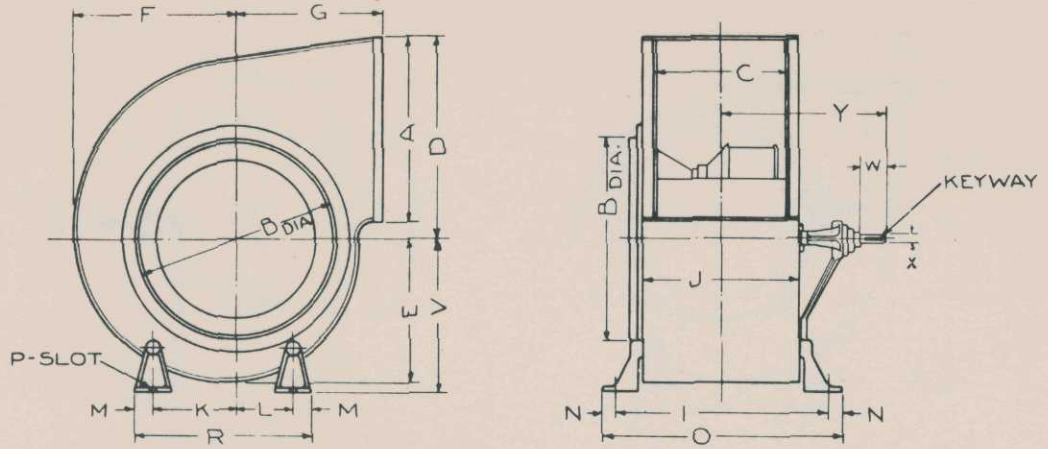
Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
12650	1000	4550	358	2.53	4700	371	2.88	5100	402	3.61	5450	430	4.42	5800	457	5.25
13900	1100	4730	373	2.88	4920	387	3.22	5280	416	3.96	5640	444	4.80	5950	468	5.70
15200	1200	4920	388	3.21	5100	402	3.57	5450	429	4.37	5750	453	5.15	6080	479	6.10
16500	1300	5130	404	3.61	5310	418	4.02	5600	442	4.84	5950	468	5.68	6240	491	6.55
17700	1400	5330	420	4.07	5500	433	4.47	5820	458	5.30	6120	482	6.15	6400	505	7.15
19000	1500	5500	433	4.50	5700	449	4.95	6030	475	5.85	6330	498	6.75	6590	519	7.75
20300	1600	5710	450	5.06	5880	463	5.45	6220	490	6.55	6500	511	7.45	6780	533	8.40
21500	1700	5920	467	5.60	6110	482	6.12	6390	503	7.05	6700	528	8.13	6970	549	9.20
22800	1800	6130	483	6.20	6370	502	6.90	6600	520	7.75	6850	540	8.75	7160	564	9.90
24100	1900	6350	500	6.83	6490	511	7.37	6800	535	8.45	7100	558	9.65	7320	577	10.6
25400	2000	6550	516	7.60	6700	528	8.13	7020	553	9.45	7310	576	10.6	7550	595	11.5
27900	2200	7000	550	9.20	7170	565	9.90	7430	585	11.0	7710	607	12.4	7950	626	13.6
30400	2400	7430	585	11.0	7600	598	12.0	7820	616	13.1	8120	640	14.5	8380	660	15.7
32900	2600	7900	622	13.2	8010	632	13.8	8270	652	15.4	8550	673	16.8	8790	692	18.4
35500	2800	8310	657	15.6	8500	670	16.5	8710	686	18.0	8960	706	19.6	9200	725	21.0
38000	3000	8800	692	18.3	9000	705	19.3	9200	725	21.0	9400	740	22.3	9650	760	24.2
40500	3200	9370	732	21.7	9400	738	23.5	9620	758	24.5	9900	780	26.0	10000	790	27.6
43000	3400	9840	770	23.0	9900	778	26.0	10060	798	27.8	10400	815	30.0	10500	830	31.6
45600	3600	10250	808	29.0	10400	818	30.0	10600	835	32.0	10800	850	33.8	11000	865	35.7

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
19000	1500	6860	541	8.70	7050	555	9.40	7360	580	10.9	7630	600	11.9	7840	617	12.9
20300	1600	7050	555	9.45	7290	574	10.4	7550	595	11.6	7800	614	12.7	8000	630	13.8
21500	1700	7240	570	10.1	7500	590	11.5	7700	607	12.4	7970	627	13.6	8190	644	14.7
22800	1800	7400	583	11.0	7660	604	12.2	7910	624	13.4	8150	640	14.5	8350	657	15.7
24100	1900	7620	600	12.0	7840	617	12.9	8040	637	14.3	8310	654	15.3	8550	673	16.6
25400	2000	7840	617	12.9	8040	633	14.0	8250	650	15.2	8500	670	16.6	8750	688	17.8
27900	2200	8200	646	15.0	8380	660	16.1	8640	680	17.5	8900	700	18.9	9150	720	20.2
30400	2400	8630	680	17.3	8790	692	18.4	9050	713	20.2	9300	730	21.4	9450	745	22.8
32900	2600	9000	710	19.8	9200	725	20.7	9420	742	22.6	9650	760	24.3	9850	775	25.7
35500	2800	9420	742	22.4	9650	760	24.1	9860	776	25.8	10050	792	27.8	10300	811	29.4
38000	3000	9880	780	26.0	10000	792	27.4	10300	810	29.2	10500	825	30.8	10650	838	32.8
40500	3200	10300	812	29.5	10500	825	31.0	10700	841	32.7	10900	858	34.7	11050	870	36.8
43000	3400	10700	845	33.5	11000	865	35.5	11180	878	37.0	11300	890	39.3	11550	908	41.5
45600	3600	11200	880	37.7	11420	900	40.0	11580	910	42.0	11800	930	44.5	11950	940	46.5
48200	3800	11650	915	42.0	11850	930	44.0	12000	945	46.2	12300	965	48.5	12300	970	50.8
50600	4000	12150	955	47.5	12260	965	49.5	12420	975	51.8	12650	995	54.5	12700	1000	56.7
53200	4200	12600	990	53.2	12700	995	54.5	12950	1015	57.0	13100	1030	59.5	13200	1040	62.8
55700	4400	13000	1025	60.5	13200	1035	61.0	13450	1055	64.3	13580	1065	66.0	13700	1080	69.5
58200	4600	13550	1060	66.0	13700	1075	68.0	13860	1090	70.0	14050	1100	73.0	14150	1115	76.5

Figures below heavy line indicate that fans running at 10,000 Fpm or higher require a special reinforced wheel, supplied at extra cost.

DIMENSIONS OF ILG TYPE "BC" CENTRFIUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

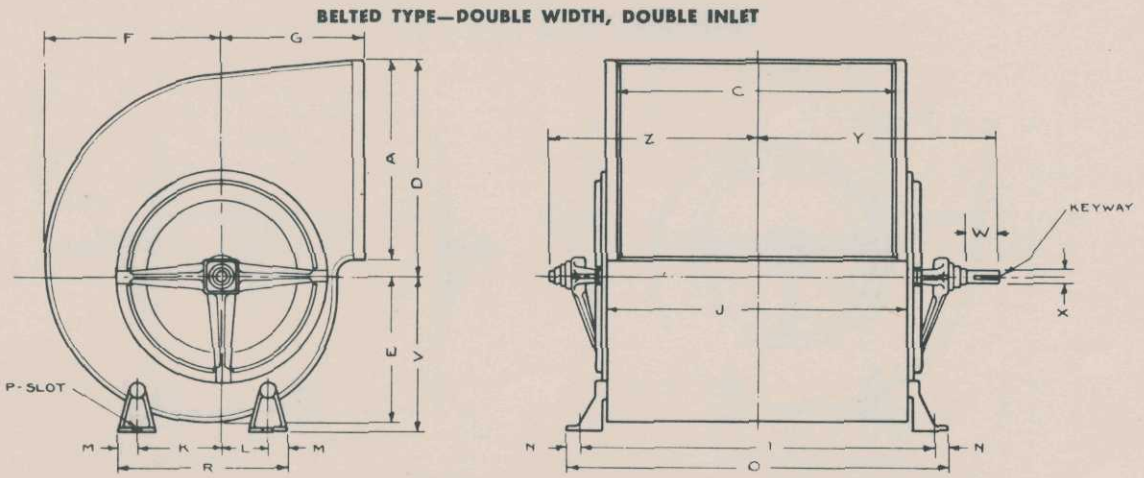


Fan is shown for discharge 1F-24C-46W-57W. Pulley is on opposite side for discharge 2F-23C-45W-58W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14 1/8	10	11 3/4	10 1/8	14 1/4	10 1/4	6	3 3/4	1 1/4	3/4	15 3/4	5/8	12 1/4	10 1/2	3 7/8	1 3/16	14 1/4	3/16x3/32	95
30	16	16	11	17 3/8	12 1/8	14 1/4	12	17	12 1/2	7 1/4	4 1/2	1 1/2	1	19	5/8	14 3/4	12 3/4	3 11/16	1 3/16	15 7/8	3/16x3/32	140
35	19	19	13	20 1/2	14 1/4	16 3/4	14	19 3/4	14 3/4	8 1/2	5 1/4	1 3/4	1 1/8	22	5/8	17 1/4	14 3/4	4 1/4	1 3/16	18 3/8	3/16x3/32	170
40	22	22	15	23 5/8	16 3/8	19 1/4	16	22 1/2	17	9 3/4	6 1/4	2	1 3/8	25 1/4	3/4	20	17	4 5/16	1 3/16	21 1/8	3/16x3/32	250
45	25	25	17	26 3/4	18 1/2	21 3/4	18	25 1/4	19 1/8	11	7	2 1/4	1 5/8	28 1/2	3/4	22 1/2	19	5	1 11/16	23 5/8	3/8x3/16	350
50	28	28	19	29 7/8	20 5/8	24 1/4	20	28 1/4	21 3/8	12 1/2	8	2 1/2	1 3/4	31 3/4	7/8	25 1/2	21	5	1 11/16	25 3/4	3/8x3/16	400
55	31	31	21	33	22 3/4	26 3/4	22	31	23 5/8	13 3/4	8 1/2	2 3/4	2	35	7/8	27 3/4	23 1/2	5 5/8	1 11/16	28 1/2	3/8x3/16	475
60	34	34	23	36 1/8	24 7/8	29 1/4	24	33 3/4	25 7/8	15	9 1/2	3	2 1/4	38 1/4	1	30 1/2	25 1/2	5 11/16	1 11/16	30 1/2	3/8x3/16	890
65	37	37	25	39 1/4	27	31 3/4	26	35 3/4	27 7/8	15	10	3	2 1/4	40 1/4	1	31	27 3/4	5 7/8	2 3/16	27	1/2x1/4	1025
70	40	40	27	42 3/8	29 1/8	34 1/4	28	38	30	15	10	3 1/2	3	44	1	32	30 1/2	6 1/16	2 7/16	36 3/4	1/2x1/4	1200
80	46	46	31	48 1/8	34 3/8	40 1/4	31 1/8	43	30 5/8	17	12	4	3 1/2	50	1 1/8	37	35	6 1/4	2 7/16	40 1/4	1/2x1/4	1800
90	52	52	35	54 1/8	38 5/8	45 1/4	34 5/8	49	34 5/8	19	14	4 1/2	4	57	1 1/8	42	39	7 1/2	2 13/16	47 3/4	1/2x1/4	2400

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 1F-24C-46W-57W. Pulley is on opposite side for discharge 2F-23C-45W-58W

DIMENSIONS IN INCHES

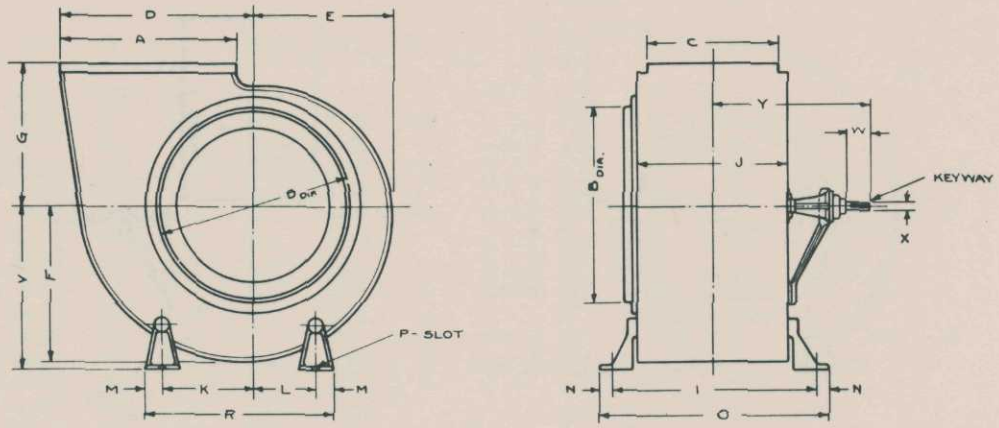
Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26 1/2	28	38	29 7/8	20 5/8	24 1/4	20	47 1/4	40 3/8	12 1/2	8	2 1/2	1 3/4	50 3/4	7/8	25 1/2	21	7	1 11/16	32 1/4	3/8x3/16	26	600
55	29 1/4	31	42	33	22 3/4	26 3/4	22	52	44 5/8	13 3/4	8 1/2	2 3/4	2	56	7/8	27 3/4	23 1/2	8 1/2	1 11/16	36	3/8x3/16	28	700
60	32	34	46	36 1/8	24 7/8	29 1/4	24	56 3/4	48 7/8	15	9 1/2	3	2 1/4	61 1/4	1	30 1/2	25 1/2	9 13/16	1 11/16	40	3/8x3/16	31	1100
65	34 1/4	37	50	39 1/4	27	31 3/4	26	59 1/4	52 7/8	15	10	3	2 1/4	65 1/4	1	31	27 3/4	10 1/2	2 3/16	43 1/4	1/2x1/4	34 1/4	1325
70	37 1/2	40	54	42 3/8	29 1/8	34 1/4	28	65	57	15	10	3 1/2	3	71	1	32	30 1/2	11 1/4	2 7/16	48	1/2x1/4	37 1/2	1600
80	43	46	62	48 1/8	34 3/8	40 1/4	31 1/8	74	61 5/8	17	12	4	3 1/2	81	1 1/8	37	35	11 1/2	2 7/16	52 1/4	1/2x1/4	41 1/2	2375
90	48 1/2	52	70	54 1/8	38 5/8	45 1/4	34 5/8	84	69 5/8	19	14	4 1/2	4	92	1 1/8	42	39	12	2 13/16	58 1/2	1/2x1/4	47 1/2	3200

NOTE—Wheel dia. BC25 12 1/4"; BC 30 15".

See page 2 for discharge arrangement numbers.

DIMENSIONS OF ILG TYPE "BC" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

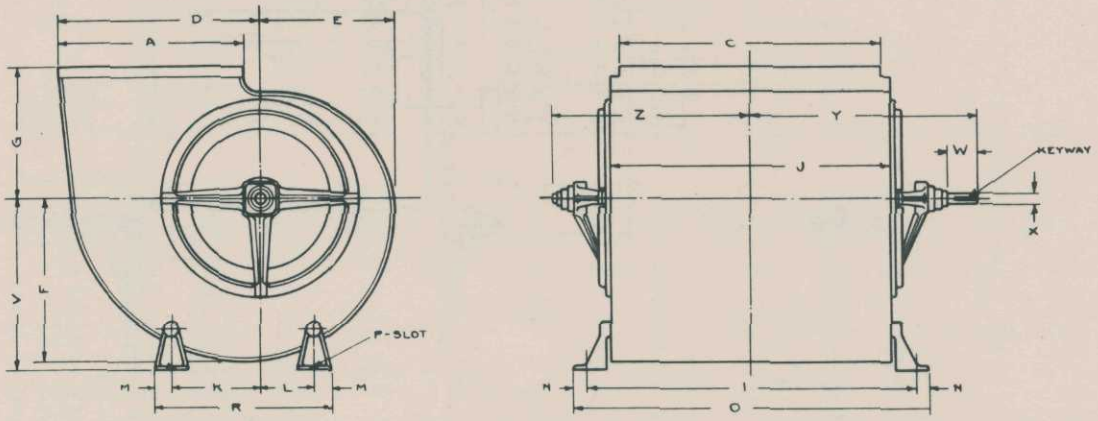


Fan is shown for discharge 6F-27C-44W-51W. Pulley is on opposite side for discharge 5F-28C-43W-52W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14 1/8	10	11 3/4	10 1/8	14 1/4	10 1/4	6 1/2	4 1/4	1 1/4	3/4	15 3/4	5/8	13 1/4	12 1/4	3 7/8	1 3/16	14 1/4	3/16 x 3/32	95
30	16	16	11	17 3/8	12 1/8	14 1/4	12	17	12 1/2	8	5 1/4	1 1/2	1	19	5/8	16 1/4	14 3/4	3 11/16	1 3/16	15 7/8	3/16 x 3/32	140
35	19	19	13	20 1/2	14 1/4	16 3/4	14	19 3/4	14 3/4	9	6	1 3/4	1 1/8	22	5/8	18 1/2	17 1/4	4 1/4	1 3/16	18 3/8	3/16 x 3/32	170
40	22	22	15	23 5/8	16 3/8	19 1/4	16	22 1/2	17	10 3/4	7	2	1 3/8	25 1/4	3/4	21 3/4	20	4 5/16	1 3/16	21 1/8	3/16 x 3/32	250
45	25	25	17	26 3/4	18 1/2	21 3/4	18	25 1/4	19 1/8	12	8	2 1/4	1 5/8	28 1/2	3/4	24 1/2	22 1/4	5	1 11/16	23 5/8	3/8 x 3/16	350
50	28	28	19	29 7/8	20 5/8	24 1/4	20	28 1/4	21 3/8	13 1/2	8 3/4	2 1/2	1 3/4	31 3/4	7/8	27 1/4	24 3/4	5	1 11/16	25 3/4	3/8 x 3/16	400
55	31	31	21	33	22 3/4	26 3/4	22	31	23 5/8	15	9 3/4	2 3/4	2	35	7/8	30 1/4	27 1/4	5 5/8	1 11/16	28 1/2	3/8 x 3/16	475
60	34	34	23	36 1/8	24 7/8	29 1/4	24	33 3/4	25 7/8	16	10 1/2	3	2 1/4	38 1/4	1	32 1/2	30	5 11/16	1 11/16	30 1/2	3/8 x 3/16	890
65	37	37	25	39 1/4	27	31 3/4	26	35 3/4	27 7/8	17	10 1/2	3	2 1/4	40 1/4	1	33 1/2	32 3/8	6 1/4	2 3/16	33 1/8	1/2 x 1/4	1025
70	40	40	27	42 3/8	29 1/8	34 1/4	38	38	30	18	12	3 1/2	3	44	1	37	35 1/2	6 1/16	2 7/16	36 3/4	1/2 x 1/4	1200
80	46	46	31	48 1/8	34 3/8	40 1/4	31 1/8	43	30 5/8	21	14	4	3 1/2	50	1 1/8	43	41	6 1/4	2 7/16	40 1/4	1/2 x 1/4	1800
90	52	52	35	54 1/8	38 5/8	45 1/4	34 5/8	49	34 5/8	24	16	4 1/2	4	57	1 1/8	49	45 3/4	7 1/2	2 15/16	47 3/4	1/2 x 1/4	2400

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 6F-27C-44W-51W. Pulley is on opposite side for discharge 5F-28C-43W-52W

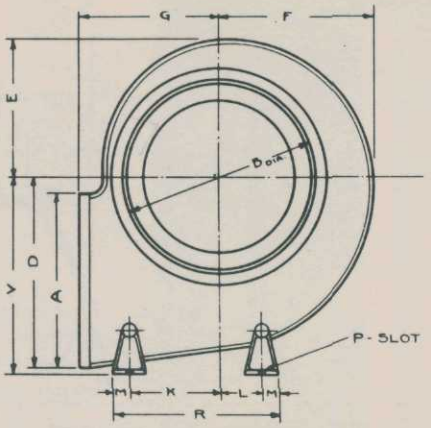
DIMENSIONS IN INCHES

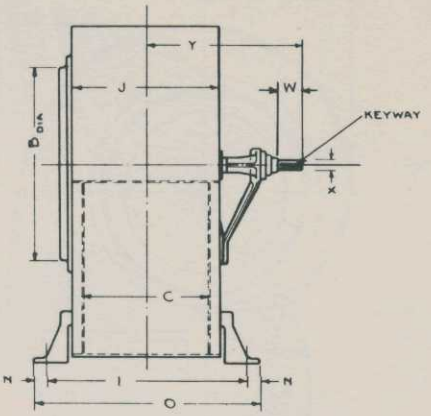
Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26 1/2	28	38	29 7/8	20 5/8	24 1/4	20	47 1/4	40 3/8	13 1/2	8 3/4	2 1/2	1 3/4	50 3/4	7/8	27 1/4	24 3/4	7	1 11/16	32 1/4	3/8 x 3/16	26	600
55	29 1/4	31	42	33	22 3/4	26 3/4	22	52	44 5/8	15	9 3/4	2 3/4	2	56	7/8	30 1/4	27 1/2	8 1/2	1 11/16	36	3/8 x 3/16	28	700
60	32	34	36	36 1/8	24 7/8	29 1/4	24	56 3/4	48 7/8	16 1/4	10 1/2	3	2 1/4	61 1/4	1	32 3/4	30	9 13/16	1 11/16	40	3/8 x 3/16	31	1100
65	34 3/4	37	50	39 1/4	27	31 3/4	26	60 3/4	52 7/8	17	10 1/2	3	2 1/4	65 1/4	1	33 1/2	32 3/8	10 1/2	2 3/16	43 1/4	1/2 x 1/4	34 1/4	1325
70	37 1/2	40	54	42 3/8	29 1/8	34 1/4	28	65	57	18	12	3 1/2	3	71	1	37	35	11 11/16	2 7/16	48	1/2 x 1/4	37 1/2	1600
80	43	46	62	48 1/8	34 3/8	40 1/4	31 1/8	74	61 5/8	21	14	4	3 1/2	81	1 1/8	43	41	11 1/2	2 7/16	52 1/4	1/2 x 1/4	41 1/2	2373
90	48 1/2	52	70	54 1/8	38 5/8	45 1/4	34 5/8	84	69 5/8	24	16	4 1/2	4	92	1 1/8	49	45 3/4	12	2 15/16	58 1/2	1/2 x 1/4	47 1/2	3200

See page 2 for discharge arrangement numbers.

DIMENSIONS OF ILG TYPE "BC" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET



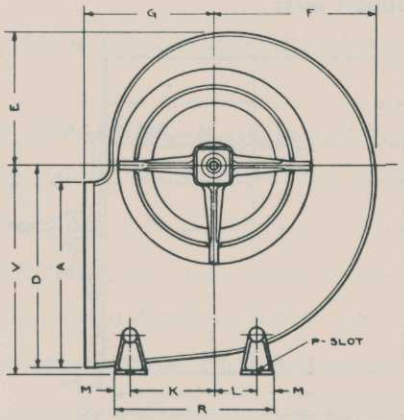


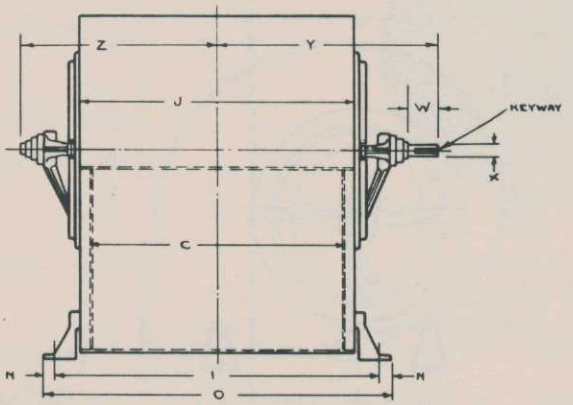
Fan is shown for discharge 4F-21C-47W-56W. Pulley is on opposite side for discharge 3F-22C-48W-55W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14⅛	10	11¾	10⅛	14¼	10¼	6¾	3¼	1¼	¾	15¾	⅝	12½	14⅝	3⅞	1⅜16	14¼	3⁄16x3⁄32	95
30	16	16	11	17⅜	12⅛	14¼	12	17	12½	8¼	4	1½	1	19	⅝	15¼	17¾	3 1⁄16	1⅜16	15⅞	3⁄16x3⁄32	140
35	19	19	13	20½	14¼	16¾	14	19¾	14¾	9½	4½	1¾	1⅛	22	⅝	17½	21	4¼	1⅜16	18⅜	3⁄16x3⁄32	170
40	22	22	15	23⅝	16⅜	19¼	16	22½	17	11	5	2	1⅜	25¼	¾	20	24¼	4⅝16	1⅜16	21⅛	3⁄16x3⁄32	250
45	25	25	17	26¾	18½	21¾	18	25¼	19⅛	12½	5	2¼	1⅝	28½	¾	22	27¼	5	1 1⁄16	23⅝	⅜x3⁄16	350
50	28	28	19	29⅞	20⅝	24¼	20	28¼	21⅜	14	6	2½	1¾	31¾	⅞	25	30½	5	1 1⁄16	25¾	⅜x3⁄16	400
55	31	31	21	33	22¾	26¾	22	31	23⅝	15	6	2¾	2	35	⅞	26½	33¾	5⅝	1 1⁄16	28½	⅜x3⁄16	475
60	34	34	23	36⅛	24⅞	29¼	24	33¾	25⅞	17	7	3	2¼	38¼	1	30	36¾	5 1⁄16	1 1⁄16	30½	⅜x3⁄16	890
65	37	37	25	39¼	27	31¾	26	35¾	27⅞	19	7	3	2¼	40¼	1	32	39¾	6¼	2 3⁄16	33⅛	½x¼	1025
70	40	40	27	42⅜	29⅛	34¼	28	40	30	21	8	.....	.....	46½	1	37	43½	6 1⁄16	2⅞16	36¾	½x¼	1200
80	46	46	31	48⅛	34⅜	40¼	31⅛	43	30⅝	24	8	4	3½	50	1⅛	40	50½	6¼	2⅞16	40¼	½x¼	1800
90	52	52	35	54⅛	38⅝	45¼	34⅜	49	34⅝	26½	9	4½	4	57	1⅛	44½	56½	7½	2 1⁄16	47¾	½x¼	2400

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET





Fan is shown for discharge 4F-21C-47W-56W. Pulley is on opposite side for discharge 3F-22C-48W-55W

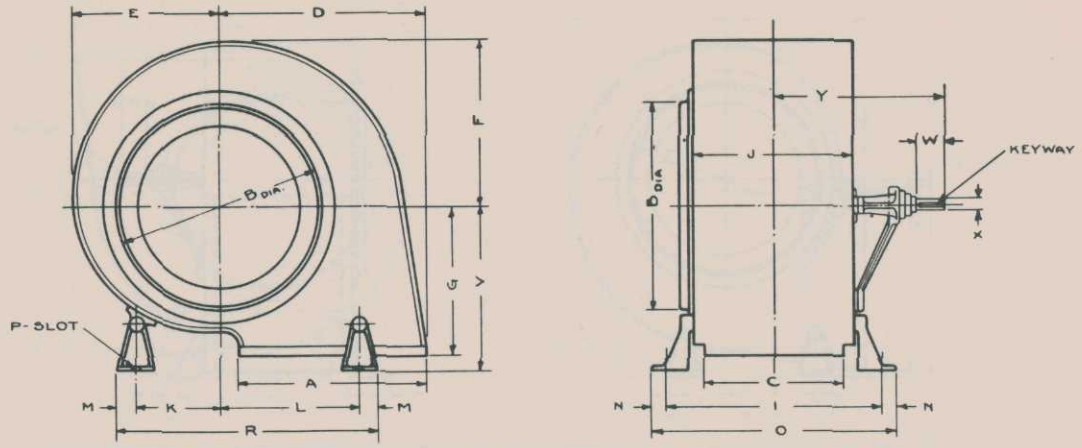
DIMENSIONS IN INCHES

Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26½	28	38	29⅞	20⅝	24¼	20	47¼	40⅜	14	6	2½	1¾	50¾	⅞	25	30½	7	1 1⁄16	32¼	⅜x3⁄16	26	600
55	29¼	31	42	33	22¾	26¾	22	52	44⅝	15	6	2¾	2	56	⅞	26½	33¾	8½	1 1⁄16	36	⅜x3⁄16	28	700
60	32	34	46	36⅛	24⅞	29¼	24	56¾	48⅞	17	7	3	2¼	61¼	1	30	36¾	9⅝	1 1⁄16	40	⅜x3⁄16	31	1100
65	34¾	37	50	39¼	27	31¾	26	60¾	52⅞	19	7	3	2¼	65¼	1	32	39¾	10½	2 3⁄16	43¼	½x¼	34¼	1325
70	37½	40	54	41⅝	30⅛	35¼	27⅛	65	53⅝	21	8	3½	3	71	1	36	43½	11	2⅞16	46½	½x¼	36	1600
80	43	46	62	48⅛	34⅜	40¼	31⅛	74	61⅝	24	8	4	3½	81	1⅛	40	50½	11½	2⅞16	52¼	½x¼	41½	2375
90	48½	52	70	54⅛	38⅝	45¼	34⅝	84	69⅝	26½	9	4½	4	92	1⅛	44½	56½	12	2 1⁄16	58½	½x¼	47½	3200

See page 2 for discharge arrangement numbers.

DIMENSIONS OF ILG TYPE "BC" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

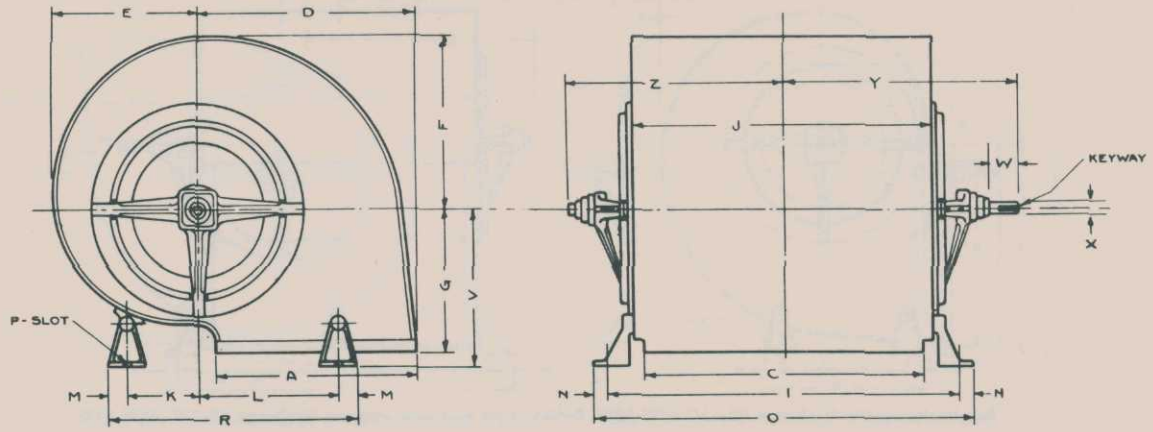


Fan is shown for discharge 7F-26C-41W-54W. Pulley is on opposite side for discharge 8F-25C-42W-53W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14 1/8	10	11 3/4	10 1/8	14 1/4	10 1/4	5 1/4	10	1 1/4	3/4	15 3/4	5/8	17 3/4	10 3/4	3 7/8	1 3/16	14 1/4	3/16 x 3/32	95
30	16	16	11	17 3/8	12 1/8	14 1/4	12	17	12 1/2	7	12	1 1/2	1	19	5/8	22	12 1/2	3 11/16	1 3/16	15 7/8	3/16 x 3/32	140
35	19	19	13	20 1/2	14 1/4	16 3/4	14	19 3/4	14 3/4	8 1/2	14	1 3/4	1 1/8	22	5/8	26	14 1/2	4 1/4	1 3/16	18 3/8	3/16 x 3/32	170
40	22	22	15	23 5/8	16 3/8	19 1/4	16	22 1/2	17	10	16 1/2	2	1 3/8	25 1/4	3/4	30 1/2	16 1/2	4 5/16	1 3/16	21 1/8	3/16 x 3/32	250
45	25	25	17	26 3/4	18 1/2	21 3/4	18	25 1/4	19 1/8	10 3/4	18 1/2	2 1/4	1 5/8	28 1/2	3/4	33 3/4	18 3/4	5	1 11/16	23 5/8	3/8 x 3/16	350
50	28	28	19	29 7/8	20 5/8	24 1/4	20	28 1/4	21 3/8	12 3/4	21	2 1/2	1 3/4	31 3/4	7/8	38 3/4	20 1/2	5	1 11/16	25 3/4	3/8 x 3/16	400
55	31	31	21	33	22 3/4	26 3/4	22	31	23 5/8	14	23	2 3/4	2	35	7/8	42 1/2	22 1/2	5 5/8	1 11/16	28 1/2	3/8 x 3/16	475
60	34	34	23	36 1/8	24 7/8	29 1/4	24	33 3/4	25 7/8	15 3/4	25	3	2 1/4	38 1/4	1	46 3/4	24 1/2	5 11/16	1 11/16	30 1/2	3/8 x 3/16	890
65	37	37	25	39 1/4	27	31 3/4	26	35 3/4	27 7/8	15 3/8	31	3	2 1/4	40 1/4	1	52 3/8	26 3/4	6 1/4	2 3/16	33 1/8	1/2 x 1/4	1025
70	40	40	27	42 3/8	29 1/8	34 1/4	28	38	30	17 3/4	37	3 1/2	3	44	1	61 3/4	29	6 1/16	2 7/16	36 3/4	1/2 x 1/4	1200
80	46	46	31	48 1/8	34 3/8	40 1/4	31 1/8	43	30 5/8	22 1/2	43	4	3 1/2	50	1 1/8	73 1/2	31 1/2	6 1/4	2 7/16	40 1/4	1/2 x 1/4	1800
90	52	52	35	54 1/8	38 5/8	45 1/4	34 5/8	49	34 5/8	25 1/2	48	4 1/2	4	57	1 1/8	82 1/2	35	7 1/2	2 15/16	47 3/4	1/2 x 1/4	2400

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 7F-26C-41W-54W. Pulley is on opposite side for discharge 8F-25C-42W-53W

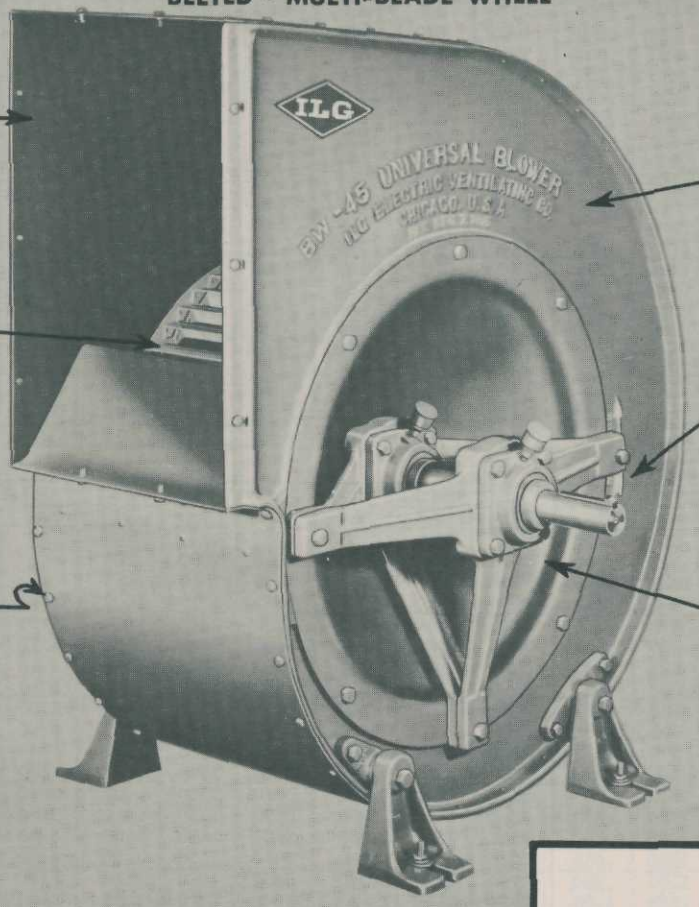
DIMENSIONS IN INCHES

Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26 1/2	28	38	29 7/8	20 5/8	24 1/4	20	47 1/4	40 3/8	12 3/4	21	2 1/2	1 3/4	50 3/4	7/8	38 3/4	20 1/2	7	1 11/16	32 1/4	3/8 x 3/16	26	600
55	29 1/4	31	42	33	22 3/4	26 3/4	22	52	44 5/8	14	23	2 3/4	2	56	7/8	42 1/2	22 1/2	8 1/2	1 11/16	36	3/8 x 3/16	28	700
60	32	34	46	36 1/8	24 7/8	29 1/4	24	56 3/4	48 7/8	15 3/4	25	3	2 1/4	61 1/4	1	46 3/4	24 1/2	9 5/8	1 11/16	40	3/8 x 3/16	31	1100
65	34 3/4	37	50	39 1/4	27	31 3/4	26	60 3/4	52 7/8	15 5/8	31	3	2 1/4	63 1/4	1	52 3/8	26 3/4	10 1/2	2 3/16	43 1/4	1/2 x 1/4	34 1/4	1325
70	37 1/2	40	54	41 5/8	30 1/8	35 1/4	27 1/8	65	53 3/8	20	37	3 1/2	3	71	1	64	27 1/2	11	2 7/16	46 1/2	1/2 x 1/4	36	1600
80	43	46	62	48 1/8	34 3/8	40 1/4	31 1/8	74	61 5/8	22 1/2	43	4	3 1/2	81	1 1/8	73 1/2	31 1/2	11 1/2	2 7/16	52 1/4	1/2 x 1/4	41 1/2	2375
90	48 1/2	52	70	54 1/8	38 5/8	45 1/4	34 5/8	84	69 5/8	25 1/2	48	4 1/2	4	92	1 1/8	82 1/2	35	12	2 15/16	58 1/2	1/2 x 1/4	47 1/2	3200

See page 2 for discharge arrangement numbers.

TYPE "BW" CENTRIFUGAL FAN SPECIFICATIONS

BELTED • MULTI-BLADE WHEEL



Rotation and angle of discharge can be changed at any time.

Dynamically balanced, overhung, multi-blade wheel, with forward curved blades.

Unobstructed inlet, free from bearings or bearing supports.

Light in weight, rugged cast sides.

Heavy-duty, cast bearing bracket supports drive shaft.

Drive shaft operates quietly on two oversized, grease-lubricated ball bearings.

Available with Floated Drive Brackets, also Variable Air Controller —See pages 34-36.

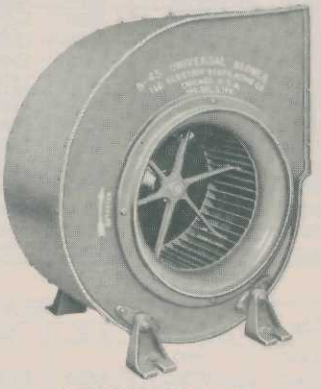
USE—Adaptable to all types of ventilating and air conditioning duty.

SIZES AND CAPACITIES—8 single width, single inlet sizes and 3 double width, double inlet sizes, ranging from 812 to 58,800 Cfm.

CONSTRUCTION—Cast sides. Steel scroll. Cast legs, drive shaft bracket, inlet and outlet connections.

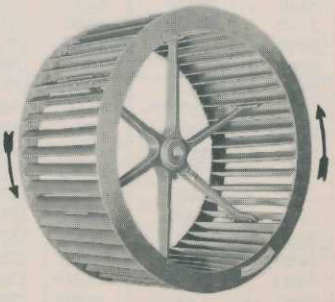
SPECIAL CONSTRUCTION OR COATINGS—For resistance to chemical action, are available at extra cost. These include special Heresite or Lithcote coatings and a range of special non-corrosive metals. (Asphaltum paint at no extra charge.) Also available: clean-out door; drain opening; non-ferrous wheels; shaft cooler for handling up to 500° F. air (standard construction handles up to 250° F. air).

DIMENSIONS AND WEIGHTS—See pages 64-67.



UNOBSTRUCTED INLET

With fan wheel overhung on drive shaft, inlet is free from bearings or other obstructions. Air flows smoothly—cannot be polluted with bearing oil. When equipped with Variable Air Controller, Controller is mounted on OUTLET.



MULTI-BLADE WHEEL WITH FORWARD CURVED BLADES

Rigid, dynamically balanced steel wheel has forward curved blades welded to side plates. Semi-steel spider.

FOR SAMPLE SPECIFICATIONS, SEE PAGE 72

TYPE BW-25 BELTED CENTRIFUGAL FAN

WHEEL DIA. 12 3/4" — OUTLET AREA .812 SQUARE FEET — SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
812	1000	1605	480	.066	1870	560	.090	2120	635	.115	2350	705	.143	2580	776	.173
894	1100	1640	492	.076	1905	570	.100	2150	643	.130	2370	708	.159	2580	773	.193
975	1200	1705	510	.088	1940	580	.115	2170	650	.145	2380	712	.173	2580	776	.206
1055	1300	1770	530	.103	2000	598	.131	2200	660	.161	2410	722	.192	2600	780	.228
1137	1400	1855	555	.124	2055	615	.148	2240	672	.182	2450	732	.214	2640	790	.249
1220	1500	1940	580	.143	2110	632	.170	2300	690	.205	2490	745	.257	2650	795	.271
1300	1600	2000	600	.163	2190	655	.195	2350	705	.224	2540	759	.263	2710	810	.298
1380	1700	2080	625	.188	2260	677	.220	2420	725	.254	2580	774	.289	2740	822	.325
1460	1800	2170	650	.217	2330	697	.246	2490	745	.284	2630	789	.315	2795	837	.362
1540	1900	2235	670	.240	2410	722	.280	2560	765	.317	2700	808	.349	2850	853	.400
1625	2000	2330	698	.273	2490	748	.315	2640	790	.354	2780	832	.394	2920	875	.432
1710	2100	2370	708	.290	2570	770	.345	2690	803	.400	2860	855	.440	2980	892	.470
1790	2200	2400	720	.320	2650	792	.390	2800	840	.436	2920	875	.492	3040	910	.515
1870	2300	2590	775	.393	2740	820	.440	2870	860	.490	3010	900	.528	3120	936	.685
1950	2400	2660	798	.431	2800	840	.476	2940	880	.528	3070	919	.572	3190	955	.625
2030	2500	2740	822	.485	2890	865	.535	3000	900	.575	3140	942	.635	3260	975	.674
2110	2600	2830	848	.525	2970	890	.585	3110	933	.643	3220	966	.692	3340	1000	.736
2190	2700	2920	875	.585	3050	915	.635	3190	955	.700	3300	990	.750	3400	1020	.790
2270	2800	3010	918	.660	3120	955	.700	3260	992	.775	3370	1030	.830	3490	1047	.865
2360	2900	3110	930	.705	3220	965	.765	3350	1005	.825	3470	1040	.900	3560	1065	.930
2440	3000	3170	947	.790	3300	986	.850	3440	1030	.910	3530	1055	.970	3650	1095	1.02

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1055	1300	2800	838	.260												
1137	1400	2820	845	.284	2970	890	.330	3340	1000	.400						
1220	1500	2860	853	.312	2970	890	.350	3370	1010	.430						
1300	1600	2870	860	.345	3010	900	.375	3370	1010	.480	3710	1110	.550			
1380	1700	2900	870	.380	3040	910	.410	3390	1015	.500	3700	1105	.590	4000	1200	.700
1460	1800	2940	880	.400	3090	925	.450	3400	1020	.550	3710	1110	.630	3980	1190	.720
1540	1900	2990	895	.430	3120	935	.490	3420	1025	.580	3710	1110	.660	3980	1190	.750
1625	2000	3070	920	.500	3190	955	.530	3440	1030	.600	3740	1120	.700	4000	1195	.810
1710	2100	3100	930	.520	3240	970	.560	3490	1045	.670	3760	1125	.750	4000	1200	.860
1790	2200	3170	950	.550	3270	980	.600	3540	1060	.710	3780	1130	.800	4020	1205	.900
1870	2300	3240	970	.600	3370	1010	.680	3590	1075	.770	3830	1145	.860	4075	1220	.960
1950	2400	3270	980	.660	3440	1030	.750	3660	1095	.810	3880	1160	.910	4110	1230	1.04
2030	2500	3370	1010	.700	3470	1040	.790	3710	1110	.860	3910	1170	.960	4140	1240	1.10
2110	2600	3440	1030	.800	3580	1070	.850	3770	1130	.940	3980	1190	1.05	4200	1255	1.18
2190	2700	3560	1065	.890	3620	1085	.920	3840	1150	1.00	4040	1210	1.12	4250	1270	1.25
2270	2800	3600	1080	.915	3710	1110	.990	3910	1170	1.05	4110	1230	1.20	4275	1280	1.32
2360	2900	3680	1100	.980	3780	1130	1.040	3980	1190	1.20	4180	1250	1.30	4360	1305	1.40
2440	3000	3790	1133	1.08	3855	1155	1.13	4075	1220	1.26	4250	1270	1.37	4430	1325	1.50
2520	3100	3810	1140	1.18	3930	1180	1.23	4110	1230	1.34	4310	1290	1.48	4480	1340	1.60
2600	3200	3910	1170	1.27	4070	1205	1.30	4210	1260	1.43	4400	1315	1.58	4540	1360	1.70
2680	3300	3990	1195	1.35	4120	1233	1.41	4250	1274	1.52	4450	1330	1.70	4610	1380	1.80
2760	3400	4070	1220	1.46	4170	1250	1.52	4360	1300	1.62	4530	1355	1.79	4680	1400	1.90
2840	3500	4150	1245	1.52	4250	1275	1.65	4400	1330	1.68	4600	1375	1.90	4760	1425	2.05
2920	3600	4230	1270	1.68	4320	1295	1.74	4500	1350	1.89	4690	1405	2.00	4830	1445	2.15
3000	3700	4300	1290	1.74	4390	1315	1.81	4570	1370	1.96	4740	1420	2.12	4910	1470	2.28
3080	3800	4400	1320	1.91	4480	1345	1.98	4660	1400	2.15	4820	1445	2.28	4980	1490	2.45
3160	3900	4470	1340	1.98	4550	1365	2.06	4740	1420	2.25	4870	1460	2.36	5060	1515	2.57
3240	4000	4560	1370	2.17	4650	1395	2.23	4820	1446	2.40	4980	1495	2.57	5130	1535	2.67

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1460	1800															
1540	1900	4350	1300	.900												
1625	2000	4275	1280	.940												
1710	2100	4275	1280	.990	4580	1370	1.15									
1790	2200	4275	1280	1.05	4580	1370	1.18	4830	1445	1.32	4950	1480	1.31	5160	1545	1.50
1870	2300	4310	1290	1.10	4580	1370	1.22	4800	1435	1.36	4950	1480	1.43	5180	1550	1.58
1950	2400	4350	1300	1.15	4590	1373	1.30	4800	1435	1.41	4960	1485	1.50	5180	1550	1.63
2030	2500	4400	1315	1.23	4600	1375	1.35	4800	1435	1.46	4980	1490	1.58	5180	1550	1.70
2110	2600	4430	1325	1.30	4610	1380	1.41	4830	1445	1.55	5020	1500	1.65	5200	1555	1.78
2190	2700	4450	1330	1.36	4640	1390	1.50	4870	1457	1.65	5050	1510	1.74	5230	1565	1.89
2270	2800	4480	1340	1.42	4675	1400	1.57	4910	1470	1.74	5060	1515	1.82	5250	1570	1.95
2360	2900	4560	1365	1.55	4750	1420	1.66	4930	1475	1.82	5110	1530	1.92	5280	1580	2.08
2440	3000	4600	1375	1.63	4780	1430	1.73	4950	1480	1.90	5150	1540	2.02	5310	1590	2.16
2520	3100	4650	1390	1.72	4830	1446	1.85	5020	1500	2.00	5210	1560	2.15	5360	1605	2.28
2600	3200	4750	1420	1.83	4910	1470	1.96	5060	1515	2.07	5230	1565	2.22	5380	1610	2.38
2680	3300	4780	1430	1.90	4950	1480	2.10	5110	1530	2.18	5280	1580	2.34	5430	1625	2.48
2760	3400	4870	1455	2.08	5020	1500	2.20	5150	1540	2.31	5310	1590	2.43	5480	1640	2.58
2840	3500	4930	1475	2.20	5060	1515	2.30	5230	1565	2.43	5380	1610	2.56	5510	1650	2.72
2920	3600	5000	1495	2.30	5110	1530	2.38	5280	1580	2.54	5430	1625	2.70	5580	1670	2.85
3000	3700	5080	1520	2.44	5200	1555	2.53	5350	1600	2.68	5500	1645	2.84	5620	1685	2.93
3080	3800	5130	1535	2.55	5270	1575	2.73	5410	1620	2.84	5550	1660	2.98	5700	1705	3.15
3160	3900	5210	1560	2.75	5350	1600	2.83	5480	1640	2.95	5600	1675	3.08	5750	1720	3.30
3240	4000	5285	1580	2.86	5410	1620	2.96	5550	1660	3.10	5680	1700	3.27	5830	1745	3.43
3320	4100	5350	1600	3.00	5480	1645	3.20	5620	1685	3.28	5750	1720	3.45	5880	1760	3.60
3400	4200	5420	1628	3.12	5570	1670	3.30	5680	1700	3.44	5810	1740	3.61	5950	1780	3.76
3490	4300	5500	1650	3.35	5670	1700	3.50	5780	1730	3.60	5900	1765	3.90	6010	1800	3.96
3570	4400	5595	1680	3.48	5720	1715	3.65	5865	1755	3.80	5980	1790	4.00	6100	1825	4.16

TYPE BW-30 BELTED CENTRIFUGAL FAN

WHEEL DIA. 15 1/2" OUTLET AREA 1.22 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
1000	900	1510	372	.072	1825	450	.105	2110	520	.140	2370	583	.179	2610	644	.216
1220	1000	1580	390	.097	1865	460	.133	2110	520	.174	2360	580	.214	2580	636	.256
1340	1100	1650	406	.115	1885	465	.150	2125	523	.192	2345	578	.234	2580	634	.281
1465	1200	1710	422	.135	1940	478	.174	2150	530	.212	2365	582	.258	2580	635	.308
1585	1300	1785	440	.159	1990	490	.197	2190	540	.240	2390	588	.284	2600	640	.336
1710	1400	1890	458	.181	2050	505	.224	2240	552	.270	2420	597	.322	2625	647	.370
1830	1500	1930	475	.209	2120	522	.253	2290	565	.303	2470	609	.350	2640	652	.405
1950	1600	2010	495	.242	2195	540	.286	2360	580	.342	2520	620	.388	2685	662	.441
2070	1700	2080	515	.277	2260	558	.327	2420	595	.384	2580	635	.433	2740	675	.490
2200	1800	2170	535	.320	2340	577	.366	2500	615	.415	2650	654	.485	2780	685	.550
2320	1900	2235	552	.355	2410	595	.413	2550	630	.465	2720	670	.540	2860	705	.620
2440	2000	2330	575	.403	2490	615	.467	2650	652	.520	2780	685	.600	2940	725	.700
	2200	2400	592	.475	2650	652	.580	2800	690	.646	2925	720	.700	3050	752	.765
	2400	2660	656	.640	2800	692	.702	2940	725	.780	3070	758	.845	3200	790	.910

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1220	1000	2820	695	.300	2980	735	.350	3410	840	.430						
1340	1100	2810	692	.340	2960	730	.360	3370	830	.480						
1465	1200	2800	690	.360	2960	728	.400	3335	822	.530	3710	915	.630			
1585	1300	2800	690	.400	2960	728	.440	3335	820	.570	3690	910	.670	4020	990	.800
1710	1400	2810	693	.430	2960	728	.480	3335	820	.600	3650	900	.700	3980	980	.830
1830	1500	2820	695	.470	2970	733	.510	3335	822	.650	3650	900	.750	3960	975	.900
1950	1600	2860	705	.500	3020	745	.550	3350	825	.700	3650	900	.800	3960	975	.950
2070	1700	2920	720	.550	3040	750	.600	3355	827	.740	3670	905	.850	3960	975	1.00
2200	1800	2960	728	.600	3100	765	.660	3370	830	.770	3690	910	.900	3960	975	1.06
2320	1900	2970	733	.650	3140	775	.730	3410	840	.850	3710	916	.980	3970	978	1.15
2440	2000	3040	750	.700	3180	785	.780	3460	852	.900	3730	920	1.03	3980	980	1.20
2560	2100	3120	770	.770	3250	800	.840	3530	870	1.00	3750	925	1.10	3985	982	1.28
2680	2200	3160	780	.850	3330	820	.920	3550	875	1.06	3770	930	1.20	4020	990	1.36
2810	2300	3250	800	.920	3370	830	1.00	3570	880	1.14	3825	943	1.25	4060	1000	1.44
2930	2400	3330	820	1.00	3430	845	1.08	3650	900	1.20	3890	960	1.35	4100	1010	1.52
3050	2500	3370	830	1.10	3510	865	1.18	3730	920	1.30	3940	970	1.45	4150	1022	1.60
3170	2600	3470	855	1.16	3580	880	1.25	3770	930	1.40	3980	980	1.56	4180	1030	1.72
3290	2700	3530	870	1.24	3620	893	1.32	3850	950	1.50	4040	995	1.65	4260	1050	1.85
3420	2800	3600	889	1.35	3700	912	1.44	3940	970	1.60	4140	1020	1.80	4350	1070	1.96
3540	2900	3680	907	1.45	3800	935	1.54	3960	977	1.70	4180	1030	1.93	4370	1075	2.10
3660	3000	3790	932	1.60	3855	950	1.67	4065	1000	1.81	4260	1050	2.05	4425	1090	2.25
	3200	3910	965	1.87	4020	990	1.92	4210	1035	2.11	4370	1080	2.28	4570	1105	2.48

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1830	1500	4260	1050	1.02	4550	1120	1.10									
1950	1600	4225	1040	1.10	4510	1110	1.20									
2070	1700	4225	1040	1.15	4480	1105	1.28	4750	1170	1.45						
2200	1800	4225	1040	1.20	4465	1100	1.35	4750	1170	1.48						
2320	1900	4225	1040	1.27	4465	1100	1.42	4750	1170	1.60	4975	1225	1.80	5170	1275	1.90
2440	2000	4225	1040	1.34	4480	1105	1.50	4750	1170	1.66	4975	1225	1.90	5170	1275	2.00
2560	2100	4240	1045	1.42	4510	1110	1.58	4750	1170	1.75	4950	1220	2.00	5170	1273	2.10
2680	2200	4260	1050	1.50	4530	1115	1.68	4760	1172	1.84	4950	1220	2.08	5170	1273	2.20
2810	2300	4300	1060	1.58	4550	1120	1.78	4765	1173	1.95	4955	1222	2.17	5170	1275	2.30
2930	2400	4350	1070	1.68	4560	1123	1.88	4770	1175	2.08	4975	1225	2.26	5170	1275	2.40
3050	2500	4370	1075	1.80	4570	1127	1.98	4780	1178	2.18	4980	1227	2.35	5175	1277	2.50
3170	2600	4400	1085	1.93	4590	1130	2.10	4790	1180	2.30	5000	1230	2.47	5200	1280	2.64
3290	2700	4465	1100	2.05	4630	1140	2.18	4830	1190	2.40	5040	1240	2.60	5220	1285	2.75
3420	2800	4510	1110	2.13	4700	1158	2.32	4890	1205	2.52	5070	1250	2.72	5260	1295	2.90
3540	2900	4570	1125	2.23	4750	1170	2.45	4950	1220	2.66	5110	1260	2.86	5280	1300	3.10
3660	3000	4610	1135	2.40	4790	1180	2.60	4975	1225	2.88	5160	1270	3.00	5300	1305	3.25
3780	3100	4670	1150	2.53	4830	1190	2.75	5000	1230	2.94	5200	1280	3.15	5330	1315	3.34
3900	3200	4750	1170	2.68	4910	1210	2.90	5070	1250	3.10	5240	1290	3.30	5360	1320	3.53
4030	3300	4790	1180	2.90	4975	1225	3.10	5140	1265	3.26	5300	1305	3.50	5420	1335	3.70
4150	3400	4875	1200	3.04	5020	1235	3.20	5170	1275	3.40	5330	1312	3.76	5460	1345	3.91
4270	3500	4950	1220	3.20	5070	1250	3.40	5200	1280	3.60	5360	1320	3.94	5520	1360	4.10
4400	3600	5000	1230	3.40	5160	1270	3.58	5310	1310	3.80	5440	1340	4.10	5580	1375	4.35
4520	3700	5070	1250	3.60	5200	1280	3.80	5330	1315	4.05	5500	1355	4.32	5650	1390	4.48
4640	3800	5130	1260	3.76	5280	1300	4.00	5420	1335	4.30	5560	1370	4.50	5710	1405	4.75
4760	3900	5210	1285	4.05	5350	1320	4.20	5460	1345	4.45	5620	1385	4.75	5750	1415	4.93
4880	4000	5285	1310	4.23	5415	1332	4.37	5520	1360	4.60	5680	1400	4.93	5850	1440	5.25

TYPE BW-35 BELTED CENTRIFUGAL FAN

WHEEL DIA. 18 1/4" OUTLET AREA 1.715 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
1030	600	1485	311	.070	1846	387	.108									
1200	700	1490	312	.081	1815	380	.120	2130	446	.167						
1370	800	1510	316	.095	1825	382	.139	2100	440	.186	2370	496	.228			
1540	900	1538	322	.113	1834	384	.158	2100	440	.204	2350	493	.262	2590	543	.310
1715	1000	1590	333	.135	1846	387	.180	2105	441	.231	2345	492	.285	2570	539	.342
1890	1100	1640	344	.160	1885	395	.209	2125	445	.261	2360	494	.319	2580	540	.378
2060	1200	1710	358	.190	1935	405	.236	2150	450	.291	2375	497	.351	2580	540	.417
2230	1300	1775	372	.215	1985	416	.275	2190	459	.330	2390	502	.392	2600	545	.460
2400	1400	1890	389	.250	2040	427	.317	2240	468	.372	2430	509	.435	2610	547	.510
2570	1500	1930	403	.290	2120	444	.352	2290	480	.420	2475	518	.485	2640	554	.557
2740	1600	2010	421	.335	2195	460	.396	2345	492	.470	2515	527	.537	2680	562	.610
2920	1700	2080	437	.385	2260	473	.453	2420	509	.514	2580	540	.605	2730	573	.673
3090	1800	2170	455	.443	2340	490	.504	2500	523	.575	2640	553	.668	2780	583	.745
3260	1900	2235	468	.491	2410	505	.572	2550	535	.645	2720	567	.730	2840	595	.820
3430	2000	2330	487	.560	2490	523	.648	2650	554	.720	2780	574	.810	2900	608	.910

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1715	1000	2810	588	.410	3000	630	.470									
1890	1100	2790	584	.455	2970	622	.510	3360	705	.648						
2060	1200	2780	583	.480	2965	621	.545	3335	698	.690	3675	770	.855			
2230	1300	2795	585	.540	2980	624	.605	3320	695	.730	3670	768	.910	3980	835	1.09
2400	1400	2800	587	.580	2985	625	.645	3325	697	.808	3630	761	.965	3940	825	1.14
2570	1500	2815	590	.630	3000	628	.700	3325	697	.860	3635	762	1.03	3935	824	1.26
2740	1600	2845	596	.683	3000	630	.755	3340	700	.931	3635	762	1.10	3930	823	1.30
2920	1700	2890	605	.760	3040	637	.817	3345	702	1.00	3650	765	1.19	3930	823	1.38
3090	1800	2930	613	.830	3080	645	.905	3370	706	1.10	3670	768	1.26	3945	826	1.44
3260	1900	2990	626	.900	3120	655	.975	3400	713	1.15	3675	770	1.35	3950	827	1.55
3430	2000	3040	637	1.00	3170	665	1.08	3440	722	1.27	3700	776	1.45	3960	830	1.64
3600	2100	3100	649	1.08	3220	675	1.15	3480	730	1.36	3740	783	1.55	3970	832	1.76
3770	2200	3160	663	1.14	3280	688	1.27	3540	742	1.46	3770	790	1.64	4020	840	1.85
3940	2300	3250	680	1.27	3340	701	1.39	3580	750	1.59	3810	798	1.78	4040	847	1.98
4120	2400	3330	693	1.36	3430	718	1.37	3630	761	1.70	3870	810	1.90	4080	855	2.15
4280	2500	3370	705	1.53	3510	735	1.64	3700	775	1.82	3910	820	2.06	4120	863	2.24
4460	2600	3470	727	1.62	3580	750	1.73	3770	790	1.92	3960	830	2.14	4180	875	2.42
4630	2700	3530	740	1.71	3620	758	1.83	3850	800	2.04	4030	845	2.34	4230	886	2.62
4800	2800	3600	755	1.87	3700	775	2.00	3940	816	2.22	4140	860	2.43	4280	898	2.75
4975	2900	3680	770	2.02	3800	795	2.13	3960	830	2.35	4180	870	2.67	4340	909	2.93

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2400	1400	4250	891	1.32												
2570	1500	4220	885	1.40	4510	945	1.60									
2740	1600	4200	880	1.45	4430	940	1.67	4730	992	1.83						
2920	1700	4200	880	1.56	4460	934	1.79	4720	990	1.96	4960	1040	2.10			
3090	1800	4210	882	1.65	4460	934	1.86	4690	983	2.07	4945	1037	2.26	5180	1085	2.48
3260	1900	4210	882	1.75	4460	934	1.94	4890	983	2.13	4930	1032	2.40	5150	1080	2.63
3430	2000	4210	882	1.87	4470	935	2.08	4690	983	2.27	4910	1030	2.55	5130	1076	2.73
3600	2100	4230	887	1.95	4475	938	2.19	4700	985	2.40	4910	1030	2.62	5130	1076	2.93
3770	2200	4250	890	2.09	4480	940	2.34	4705	986	2.54	4940	1035	2.81	5130	1075	2.98
3940	2300	4270	895	2.20	4500	944	2.46	4720	988	2.70	4940	1035	2.93	5150	1080	3.17
4120	2400	4310	903	2.30	4510	946	2.58	4730	992	2.84	4950	1038	3.12	5150	1080	3.35
4280	2500	4335	908	2.45	4550	953	2.70	4765	998	2.98	4960	1040	3.22	5160	1082	3.47
4460	2600	4375	917	2.64	4580	960	2.89	4770	1000	3.12	4980	1045	3.48	5180	1088	3.68
4630	2700	4420	927	2.80	4610	966	3.02	4820	1010	3.36	5000	1050	3.60	5200	1090	3.82
4800	2800	4470	936	3.00	4650	975	3.17	4870	1020	3.47	5030	1056	3.78	5230	1096	4.10
4975	2900	4530	948	3.19	4720	987	3.46	4890	1025	3.69	5080	1065	3.94	5250	1100	4.23
5150	3000	4580	960	3.37	4750	996	3.60	4940	1035	3.86	5110	1070	4.18	5300	1110	4.46
5320	3100	4630	970	3.56	4820	1010	3.84	4980	1045	4.08	5150	1080	4.32	5350	1120	4.65
5480	3200	4690	983	3.78	4870	1020	4.03	5040	1055	4.30	5200	1090	4.60	5370	1125	4.85
5660	3300	4790	1000	4.00	4935	1033	4.28	5110	1070	4.56	5250	1100	4.83	5420	1135	5.15
5830	3400	4875	1017	4.13	4985	1046	4.55	5140	1078	4.80	5300	1110	5.10	5470	1145	5.40
6000	3500	4950	1035	4.45	5070	1060	4.70	5200	1090	5.02	5350	1120	5.36	5510	1155	5.65
6170	3600	5000	1045	4.63	5160	1078	4.90	5310	1109	5.25	5420	1135	5.65	5580	1170	6.00
6350	3700	5070	1060	5.00	5200	1087	5.28	5330	1115	5.60	5480	1150	5.98	5630	1180	6.26
6520	3800	5130	1073	5.22	5280	1105	5.40	5420	1135	5.86	5560	1165	6.02	5680	1190	6.57
6700	3900	5210	1090	5.60	5350	1120	5.80	5460	1145	6.10	5620	1180	6.40	5750	1205	6.88

TYPE BW-40 BELTED CENTRIFUGAL FAN

WHEEL DIA. 21" — OUTLET AREA 2.29 SQUARE FEET — SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
1375	600	1500	272	.095	1855	337	.144									
1600	700	1490	271	.107	1840	334	.163									
1830	800	1530	278	.128	1830	332	.183	2125	386	.249						
2060	900	1550	282	.151	1845	335	.210	2110	384	.278	2370	432	.350	2610	475	.435
2290	1000	1595	290	.175	1860	338	.240	2110	384	.309	2350	430	.383	2600	473	.465
2520	1100	1650	300	.206	1905	346	.275	2135	388	.346	2360	431	.425	2590	471	.510
2750	1200	1720	312	.244	1935	352	.313	2160	393	.388	2365	433	.473	2595	472	.558
2980	1300	1775	323	.285	1990	362	.356	2200	400	.440	2410	438	.525	2610	475	.615
3200	1400	1890	338	.332	2050	373	.405	2250	408	.487	2440	443	.572	2630	478	.660
3440	1500	1930	351	.384	2120	385	.465	2300	418	.548	2490	452	.636	2660	484	.735
3660	1600	2010	366	.445	2195	400	.525	2360	428	.613	2530	460	.710	2695	490	.810
3900	1700	2080	380	.508	2260	412	.600	2430	442	.694	2590	470	.785	2740	498	.878
4120	1800	2170	395	.585	2340	425	.672	2500	454	.760	2640	480	.865	2790	507	.965
4350	1900	2235	407	.650	2410	439	.760	2550	465	.850	2710	493	.965	2860	520	1.07
4580	2000	2330	424	.740	2490	454	.855	2650	482	.950	2790	508	1.070	2920	530	1.19
4800	2100	2370	430	.780	2570	467	.940	2690	488	1.080	2840	517	1.13	2970	540	1.28

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2290	1000	2810	511	.548												
2520	1100	2810	510	.596	3010	547	.690									
2750	1200	2800	509	.658	2990	544	.750	3360	612	.940						
2980	1300	2810	511	.705	2990	543	.800	3330	606	1.00	3690	670	1.22			
3200	1400	2820	512	.762	2990	543	.850	3340	607	1.08	3680	668	1.30	3990	725	1.54
3440	1500	2840	516	.836	3000	546	.940	3340	607	1.16	3660	666	1.40	3960	720	1.63
3660	1600	2870	522	.905	3025	550	1.00	3350	609	1.23	3660	665	1.48	3950	718	1.73
3900	1700	2910	528	.990	3060	556	1.10	3380	615	1.34	3660	666	1.57	3950	718	1.86
4120	1800	2940	535	1.07	3100	563	1.21	3390	617	1.43	3680	668	1.68	3950	718	1.95
4350	1900	3010	547	1.19	3140	571	1.31	3410	620	1.52	3690	672	1.79	3950	718	2.05
4580	2000	3060	556	1.29	3190	580	1.39	3460	628	1.66	3730	678	1.95	3990	725	2.19
4800	2100	3120	567	1.41	3230	587	1.51	3490	635	1.76	3770	685	2.10	4010	728	2.32
5050	2200	3180	578	1.54	3320	603	1.67	3550	646	1.93	3790	690	2.19	4020	732	2.46
5270	2300	3230	588	1.64	3360	612	1.79	3610	656	2.07	3830	696	2.33	4070	740	2.62
5500	2400	3310	602	1.80	3430	625	1.94	3660	665	2.20	3880	705	2.51	4110	746	2.80
5730	2500	3370	612	1.96	3490	635	2.08	3720	676	2.40	3930	714	2.67	4150	755	2.97
5950	2600	3470	631	2.13	3580	651	2.30	3770	686	2.55	3990	725	2.83	4180	762	3.17
6200	2700	3530	643	2.26	3620	658	2.42	3820	695	2.71	4050	736	3.07	4250	773	3.38
6400	2800	3600	655	2.48	3700	672	2.65	3900	710	2.92	4110	748	3.20	4310	783	3.60
6650	2900	3680	669	2.67	3800	690	2.82	3960	720	3.13	4150	756	3.55	4350	792	3.80
6880	3000	3790	687	2.93	3855	700	3.07	4065	740	3.32	4230	770	3.65	4425	805	4.05
7100	3100	3810	692	3.20	3930	715	3.33	4130	751	3.60	4290	780	3.90	4480	815	4.32

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
3440	1500	4180	762	1.86												
3660	1600	4220	767	1.96	4500	818	2.24									
3900	1700	4225	768	2.12	4490	817	2.38	4750	864	2.68						
4120	1800	4225	768	2.22	4480	815	2.52	4750	863	2.80	4980	907	3.11			
4350	1900	4225	768	2.34	4480	815	2.64	4720	859	2.95	4970	903	3.22	5210	947	3.58
4580	2000	4230	770	2.48	4480	815	2.77	4720	858	3.11	4965	902	3.42	5200	945	3.67
4800	2100	4250	773	2.62	4480	815	2.89	4720	858	3.23	4950	900	3.58	5180	942	3.90
5050	2200	4270	776	2.75	4500	818	3.06	4720	858	3.41	4950	900	3.75	5170	940	4.15
5270	2300	4300	782	2.95	4510	820	3.24	4730	860	3.56	4965	902	3.90	5170	940	4.27
5500	2400	4320	786	3.11	4550	827	3.44	4760	866	3.79	4970	903	4.08	5180	942	4.45
5730	2500	4375	795	3.28	4575	832	3.60	4780	870	3.94	4980	908	4.33	5200	945	4.68
5950	2600	4400	799	3.45	4620	840	3.82	4820	876	4.20	5000	910	4.50	5220	948	4.90
6200	2700	4460	810	3.71	4650	845	4.02	4850	882	4.37	5040	916	4.80	5220	950	5.10
6400	2800	4480	815	3.91	4680	851	4.22	4890	889	4.63	5070	922	4.98	5240	953	5.27
6650	2900	4550	828	4.15	4730	860	4.48	4920	895	4.86	5120	930	5.25	5270	958	5.64
6880	3000	4600	837	4.40	4780	870	4.75	4970	903	5.13	5140	935	5.50	5320	967	5.87
7100	3100	4650	845	4.60	4840	880	5.00	4980	908	5.37	5170	940	5.68	5350	973	6.14
7320	3200	4720	857	4.90	4880	887	5.25	5060	920	5.65	5220	950	6.00	5400	982	6.43
7550	3300	4780	870	5.17	4950	900	5.53	5100	928	5.90	5280	960	6.32	5450	990	6.70
7800	3400	4850	882	5.48	5020	914	5.93	5170	940	6.30	5330	970	6.65	5500	1000	7.12
8000	3500	4900	892	5.78	5060	920	6.18	5220	948	6.53	5380	979	6.95	5520	1004	7.35
8250	3600	4985	908	6.10	5140	935	6.50	5280	960	6.95	5450	990	7.35	5600	1018	7.70
8500	3700	5060	920	6.65	5200	945	6.82	5360	975	7.40	5500	1000	7.83	5660	1030	8.22
8700	3800	5130	932	6.90	5270	960	7.15	5420	986	7.75	5550	1010	8.07	5700	1035	8.45
8930	3900	5210	950	7.40	5340	972	7.65	5460	995	8.12	5620	1023	8.52	5770	1050	9.00
9150	4000	5285	963	7.75	5415	985	8.00	5550	1010	8.45	5715	1040	8.90	5830	1060	9.35
9400	4100	5350	972	8.12	5480	997	9.20	5620	1025	8.80	5750	1050	9.20	5880	1070	9.85
9600	4200	5420	986	8.45	5570	1015	8.90	5700	1046	9.30	5830	1062	9.50	5950	1080	10.27

TYPE BW-45 BELTED CENTRIFUGAL FAN

WHEEL DIA. 23 3/4" OUTLET AREA 2.95 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
1770	600	1500	241	.115												
2060	700	1500	241	.137	1835	295	.207									
2360	800	1515	244	.160	1830	294	.233	2120	341	.322						
2650	900	1550	249	.188	1840	296	.266	2115	340	.348	2370	382	.450			
2950	1000	1590	256	.220	1870	300	.304	2120	341	.394	2360	380	.486	2590	417	.585
3250	1100	1650	265	.260	1895	305	.346	2130	343	.436	2370	382	.540	2580	416	.644
3540	1200	1710	275	.308	1940	312	.394	2180	348	.490	2380	383	.600	2600	418	.710
3840	1300	1800	290	.383	1990	320	.452	2200	354	.552	2410	388	.662	2600	418	.770
4130	1400	1890	299	.425	2050	330	.515	2250	362	.612	2440	393	.730	2620	422	.845
4420	1500	1930	310	.490	2110	339	.578	2290	369	.693	2480	399	.805	2650	427	.925
4720	1600	2010	323	.570	2180	351	.665	2350	379	.777	2530	407	.910	2700	435	1.01
5000	1700	2080	335	.650	2260	364	.770	2410	388	.865	2580	415	.990	2730	440	1.10
5300	1800	2170	349	.750	2340	376	.860	2480	399	.982	2630	424	1.09	2800	450	1.23
5600	1900	2235	360	.830	2410	388	.970	2550	410	1.090	2700	435	1.21	2850	458	1.36
5900	2000	2330	374	.95	2490	402	1.090	2650	425	1.22	2760	445	1.34	2910	468	1.50
6200	2100	2370	380	1.00	2570	413	1.20	2690	432	1.38	2840	457	1.45	2970	478	1.62
6500	2200	2400	386	1.110	2650	425	1.360	2800	450	1.52	2925	470	1.64	3030	488	1.83

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2950	1000	2810	452	.740												
3250	1100	2810	452	.760	2990	482	.87									
3540	1200	2800	450	.82	2980	480	.93	3365	541	1.20						
3840	1300	2810	452	.90	2980	480	1.02	3360	540	1.28	3680	592	1.56			
4130	1400	2820	454	.97	2990	482	1.10	3340	538	1.38	3660	589	1.65	3975	640	1.96
4420	1500	2830	456	1.05	3010	485	1.19	3330	536	1.45	3660	589	1.76	3965	638	2.07
4720	1600	2870	462	1.15	3020	487	1.27	3340	538	1.55	3660	589	1.87	3950	635	2.20
5000	1700	2900	467	1.24	3050	491	1.38	3365	541	1.70	3665	590	2.01	3955	636	2.32
5300	1800	2930	472	1.37	3090	498	1.51	3370	543	1.79	3680	592	2.13	3955	636	2.46
5600	1900	2990	482	1.47	3150	505	1.62	3420	550	1.93	3700	595	2.28	3965	638	2.60
5900	2000	3040	490	1.61	3180	512	1.78	3460	556	2.10	3720	598	2.44	3975	640	2.77
6200	2100	3110	500	1.76	3230	520	1.93	3495	562	2.26	3760	605	2.62	4000	643	2.94
6500	2200	3170	510	1.93	3290	530	2.08	3540	570	2.42	3790	610	2.77	4040	650	3.14
6780	2300	3230	520	2.10	3360	540	2.30	3580	577	2.60	3825	616	2.96	4060	654	3.30
7080	2400	3300	531	2.28	3420	550	2.45	3610	581	2.76	3860	622	3.12	4100	660	3.54
7380	2500	3370	542	2.51	3490	561	2.67	3720	598	3.00	3930	633	3.40	4140	666	3.76
7670	2600	3470	557	2.74	3540	570	2.85	3760	605	3.24	3970	639	3.57	4180	672	3.97
7970	2700	3530	568	2.90	3620	582	3.10	3820	615	3.46	4040	650	3.85	4250	683	4.27
8260	2800	3600	579	3.17	3700	595	3.40	3890	626	3.71	4080	658	4.10	4290	690	4.52
8550	2900	3680	591	3.42	3800	610	3.62	3960	637	4.00	4150	668	4.54	4350	700	4.80
8850	3000	3790	607	3.75	3855	620	3.95	4065	653	4.25	4230	680	4.67	4400	709	5.10
9150	3100	3810	612	4.10	3930	632	4.27	4130	664	4.60	4290	690	5.00	4475	720	5.40
9450	3200	3910	629	4.40	4020	646	4.53	4210	676	4.97	4360	702	5.33	4530	729	5.78
9750	3300	3990	641	4.70	4120	662	4.90	4250	682	5.28	4420	711	5.71	4610	741	6.16
10000	3400	4070	655	5.02	4170	670	5.30	4360	706	5.63	4530	727	6.08	4660	750	6.50
10330	3500	4150	668	5.30	4250	683	5.75	4550	730	5.85	4600	740	6.30	4740	761	6.86

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
4720	1600	4230	680	2.50												
5000	1700	4240	681	2.65	4500	723	3.04									
5300	1800	4220	679	2.79	4475	720	3.14	4730	760	3.50						
5600	1900	4220	679	2.96	4475	720	3.35	4730	760	3.70	4960	798	4.12			
5900	2000	4240	681	3.11	4475	720	3.54	4730	760	3.88	4965	798	4.28	5180	833	4.70
6200	2100	4250	683	3.30	4490	722	3.75	4730	760	4.13	4940	795	4.45	5170	831	4.95
6500	2200	4265	686	3.50	4510	725	3.94	4730	760	4.32	4950	797	4.72	5170	830	5.10
6780	2300	4290	690	3.72	4530	729	4.16	4750	762	4.56	4960	798	4.98	5170	830	5.40
7080	2400	4330	696	3.91	4550	731	4.35	4760	765	4.72	4980	801	5.22	5180	832	5.60
7380	2500	4360	702	4.17	4580	735	4.58	4780	768	4.90	4985	802	5.45	5200	835	5.90
7670	2600	4390	706	4.37	4600	740	4.85	4810	775	5.30	5005	805	5.70	5220	840	6.12
7970	2700	4450	715	4.65	4650	747	5.07	4840	779	5.55	5040	810	6.00	5240	843	6.42
8260	2800	4490	722	4.92	4690	754	5.33	4880	785	5.80	5070	815	6.30	5250	845	6.75
8550	2900	4540	730	5.25	4730	760	5.70	4920	792	6.15	5110	822	6.65	5280	850	7.05
8850	3000	4590	738	5.53	4790	770	6.03	4950	797	6.45	5140	827	6.92	5320	855	7.50
9150	3100	4640	746	5.85	4820	776	6.30	5005	805	6.72	5200	835	7.30	5360	862	7.80
9450	3200	4710	759	6.25	4890	786	6.70	5050	812	7.23	5220	840	7.68	5410	870	8.15
9750	3300	4750	765	6.45	4940	795	7.00	5110	822	7.50	5240	850	8.00	5450	875	8.60
10000	3400	4820	776	6.92	5000	804	7.42	5150	828	7.85	5320	855	8.40	5480	880	8.90
10330	3500	4900	788	7.37	5060	814	7.83	5220	840	8.32	5380	865	8.85	5550	893	9.45
10630	3600	4960	798	7.85	5140	825	8.35	5260	848	8.80	5430	873	9.35	5600	900	9.75
10900	3700	5060	813	8.50	5200	835	8.72	5340	860	9.25	5480	880	9.70	5630	905	10.2
11200	3800	5130	825	8.82	5260	846	9.15	5400	868	9.75	5550	892	10.2	5710	917	10.8
11500	3900	5210	838	9.50	5340	859	9.80	5460	880	10.4	5630	905	10.8	5770	927	11.3
11800	4000	5285	850	9.90	5415	870	10.3	5530	890	10.8	5680	912	11.2	5830	938	11.8
12100	4100	5350	860	10.4	5480	882	11.8	5620	904	11.2	5750	923	11.8	5880	945	12.4
12400	4200	5420	870	10.8	5570	896	11.5	5700	926	11.9	5820	935	12.3	5950	955	12.9
12700	4300	5500	885	11.6	5670	911	12.0	5780	930	12.4	5910	952	13.0	6040	970	13.7
13000	4400	5595	900	12.0	5720	920	12.7	5865	943	13.2	5980	962	13.9	6080	978	14.2
13300	4500	8720	920	13.0	5810	935	14.0	5970	960	14.5	6060	975	14.8	6160	990	15.0

TYPE BW-50 BELTED CENTRIFUGAL FAN

WHEEL DIA. 26 1/2" OUTLET AREA 3.7 SQUARE FEET SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
2220	600	1485	214	.15												
2590	700	1495	215	.17	1825	263	.26									
2960	800	1510	217	.20	1820	262	.29	2110	304	.40						
3330	900	1550	223	.24	1835	264	.34	2110	304	.45	2360	340	.55	2610	375	.68
3700	1000	1600	230	.28	1855	267	.39	2110	304	.50	2360	340	.62	2600	372	.73
4070	1100	1650	237	.33	1890	272	.43	2120	306	.55	2360	340	.68	2600	372	.81
4450	1200	1715	247	.40	1945	280	.50	2160	311	.63	2380	342	.75	2600	373	.90
4810	1300	1780	256	.46	1990	287	.57	2195	316	.70	2400	345	.84	2605	374	.98
5180	1400	1855	267	.54	2050	295	.66	2250	324	.80	2430	350	.92	2620	377	1.07
5550	1500	1930	278	.62	2120	305	.75	2300	331	.89	2490	358	1.03	2650	382	1.18
5920	1600	2010	289	.72	2190	315	.85	2360	340	1.00	2530	365	1.14	2695	388	1.30
6300	1700	2080	300	.82	2260	325	.97	2420	349	1.13	2590	373	1.28	2750	396	1.43
6660	1800	2160	311	.94	2330	335	1.09	2490	359	1.25	2650	381	1.40	2800	403	1.58
7030	1900	2235	322	1.04	2410	347	1.23	2560	369	1.40	2720	391	1.57	2850	410	1.73
7400	2000	2330	336	1.18	2490	358	1.39	2640	380	1.58	2780	400	1.72	2920	420	1.87
8150	2200	2400	346	1.38	2640	380	1.76	2790	401	1.92	2920	420	2.08	3060	440	2.29
8800	2400	2660	384	1.87	2800	405	2.30	2920	421	2.37	3060	440	2.46	3170	457	2.67
9620	2600	2830	408	2.28	2970	428	2.43	3090	445	2.70	3230	465	2.98	3340	481	3.23
10360	2800	3010	433	2.84	3120	450	3.02	3260	470	3.34	3370	485	3.56	3480	502	3.80
11100	3000	3170	457	3.38	3300	475	3.66	3440	495	3.94	3530	508	4.20	3650	525	4.45
11850	3200	3340	482	4.00	3470	500	4.30	3590	517	4.60	3710	535	4.90	3800	548	5.18

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
3700	1000	2810	405	.88	3020	435	1.00									
4070	1100	2800	403	.96	3000	432	1.10									
4450	1200	2800	402	1.05	2990	430	1.18	3340	482	1.49						
4810	1300	2800	403	1.15	2980	428	1.27	3340	481	1.60	3680	530	1.95			
5180	1400	2805	404	1.23	2990	430	1.39	3330	480	1.74	3660	526	2.08	3960	570	2.45
5550	1500	2840	408	1.35	3000	432	1.50	3330	480	1.85	3650	525	2.21	3950	569	2.57
5920	1600	2860	412	1.45	3020	435	1.61	3330	480	1.98	3670	527	2.36	3950	569	2.76
6300	1700	2890	417	1.59	3060	440	1.79	3340	482	2.13	3675	528	2.56	3955	568	2.94
6660	1800	2950	425	1.75	3090	445	1.91	3380	487	2.28	3675	528	2.69	3955	568	3.10
7030	1900	2990	430	1.90	3130	451	2.07	3420	493	2.50	3680	530	2.84	3960	570	3.30
7400	2000	3060	440	2.07	3185	459	2.25	3450	497	2.65	3700	533	3.05	3965	571	3.46
8150	2200	3180	458	2.48	3300	475	2.66	3550	512	3.10	3790	546	3.54	4030	580	3.97
8800	2400	3290	473	2.85	3410	491	3.10	3640	524	3.50	3860	556	3.95	4080	588	4.40
9620	2600	3440	496	3.44	3550	512	3.65	3780	545	4.15	3990	574	4.72	4190	604	5.05
10360	2800	3600	518	4.00	3720	535	4.30	3910	563	4.80	4100	591	5.25	4300	619	5.75
11100	3000	3740	538	4.65	3850	555	4.95	4050	583	5.50	4230	608	6.00	4420	636	6.60
11850	3200	3910	563	5.48	4020	578	5.75	4200	605	6.30	4375	630	6.80	4550	655	7.45
12600	3400	4070	586	6.28	4150	598	6.55	4375	630	7.25	4520	650	7.70	4700	676	8.40
13300	3600	4230	610	7.20	4300	620	7.45	4480	645	8.00	4650	670	8.65	4830	695	9.40
14100	3800	4400	635	8.25	4480	646	8.60	4650	670	9.25	4830	695	9.90	4970	716	10.4
14800	4000	4560	658	9.33	4650	671	9.70	4810	692	10.3	4970	715	11.0	5130	738	11.6
15550	4200	4730	682	10.6	4800	692	10.90	4970	717	11.6	5140	740	12.4	5300	764	13.3
16300	4400	4910	707	11.9	4980	718	12.20	5130	740	13.0	5280	760	14.0	5430	783	14.5
17000	4600	5050	728	13.2	5130	740	13.60	5280	762	14.4	545C	785	15.1	5570	803	15.9

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
5550	1500	4240	610	3.00												
5920	1600	4240	610	3.18	4510	650	3.60									
6300	1700	4220	607	3.36	4480	645	3.78	4730	682	4.25						
6600	1800	4220	607	3.52	4480	645	3.97	4720	680	4.45	4970	716	4.85			
7030	1900	4210	606	3.78	4470	644	4.20	4720	680	4.67	4960	715	5.20	5200	748	5.67
7400	2000	4220	607	3.95	4470	644	4.47	4700	678	4.90	4940	711	5.40	5170	745	5.95
8150	2200	4270	615	4.44	4475	646	4.94	4720	680	5.45	4940	711	5.95	5150	742	6.45
8800	2400	4300	620	4.90	4510	650	5.40	4730	681	5.95	4950	712	6.45	5170	745	7.20
9620	2600	4380	632	5.60	4590	661	6.18	4790	690	6.70	5000	720	7.20	5200	748	7.80
10360	2800	4480	646	6.32	4670	674	6.80	4860	700	7.35	5070	730	7.95	5240	755	8.60
11100	3000	4610	664	7.10	4770	689	7.60	4960	715	8.20	5120	739	8.80	5310	765	9.50
11850	3200	4720	680	8.00	4900	705	8.55	5050	728	9.05	5250	756	9.85	5380	775	10.3
12600	3400	4860	700	9.00	5020	722	9.50	5170	745	10.1	5320	767	10.7	5500	791	11.3
13300	3600	4980	718	9.70	5140	740	10.6	5280	762	11.3	5450	785	11.9	5590	805	12.5
14100	3800	5120	739	11.2	5280	760	11.9	5410	780	12.5	5550	800	13.0	5700	822	13.9
14800	4000	5280	760	12.3	5410	780	13.0	5550	798	13.6	5700	820	14.5	5840	841	15.2
15550	4200	5420	780	13.8	5440	798	14.5	5690	820	15.3	5830	840	15.9	5970	860	16.7
16300	4400	5595	807	15.0	5660	815	15.6	5830	840	16.7	5970	860	17.6	6100	878	18.3
17000	4600	5720	825	16.4	5810	841	17.5	5970	860	18.8	6100	880	19.0	6210	895	19.8
17750	4800	5880	850	18.5	6020	867	19.0	6130	882	20.0	6250	900	20.9	6370	918	21.6
18500	5000	6050	873	20.5	6150	888	21.3	6300	908	22.2	6420	925	22.9	6530	940	23.8
19250	5200	6200	895	22.5	6320	912	23.3	6450	930	24.3	6550	943	24.8	6650	960	25.7
20000	5400	6360	917	24.5	6480	935	25.3	6620	955	26.3	6700	965	27.0	6830	985	28.4
20700	5600	6520	940	26.5	6660	960	27.8	6760	975	28.5	6800	990	29.5	7000	1008	30.6
21500	5800	6700	966	29.4	6830	985	30.3	6940	1000	31.0	7020	1010	31.9	7130	1028	33.0
22200	6000	6870	990	31.5	702C	1010	33.3	7100	1020	33.6	7230	1040	35.1	7300	1050	35.5
23000	6200	7020	1010	34.0	7130	1025	35.1	7270	1045	36.3	7370	1060	37.8	7460	1075	38.4
23700	6400	7200	1035	36.9	7300	1050	38.2	7450	1070	39.5	7500	1080	40.4	7600	1095	41.5

TYPE BW-55 BELTED CENTRIFUGAL FAN

WHEEL DIA. 29 1/4" | OUTLET AREA 4.52 SQUARE FEET | SINGLE WIDTH SINGLE INLET

Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
2260	500	1500	196	.15												
2710	600	1490	194	.18	1840	240	.27									
3160	700	1490	194	.21	1825	238	.31	2130	278	.42						
3610	800	1510	197	.25	1825	238	.36	2110	275	.47	2380	310	.61			
4070	900	1540	201	.29	1830	239	.41	2110	275	.54	2365	308	.67	2600	339	.82
4520	1000	1590	207	.34	1860	242	.47	2100	274	.60	2360	307	.75	2585	337	.90
4970	1100	1650	215	.41	1890	246	.54	2130	278	.68	2360	307	.83	2580	336	.99
5420	1200	1710	223	.48	1935	252	.61	2155	281	.75	2380	310	.91	2580	336	1.06
5880	1300	1780	232	.56	1990	259	.70	2200	287	.86	2400	313	1.02	2590	338	1.18
6330	1400	1860	242	.66	2050	267	.80	2240	292	.96	2430	317	1.11	2615	341	1.29
6780	1500	1920	250	.76	2110	275	.91	2300	300	1.11	2480	323	1.26	2670	346	1.43
7240	1600	2000	261	.88	2190	285	1.04	2355	307	1.21	2525	329	1.40	2690	351	1.58
7680	1700	2080	272	.99	2255	294	1.18	2415	315	1.36	2580	336	1.52	2740	357	1.72
8140	1800	2170	284	1.14	2325	303	1.32	2485	324	1.52	2640	344	1.70	2800	365	1.92
8600	1900	2235	292	1.26	2410	314	1.50	2560	334	1.70	2710	353	1.88	2840	371	2.10
9050	2000	2330	304	1.44	2490	326	1.66	2630	343	1.89	2770	361	2.10	2915	380	2.31
9950	2200	2400	314	1.68	2650	346	2.06	2780	363	2.33	2915	380	2.57	3045	397	2.78
10850	2400	2660	348	2.27	2800	366	2.50	2940	384	2.77	3070	400	3.07	3200	416	3.32
11750	2600	2830	370	2.77	2970	388	3.08	3110	407	3.38	3220	420	3.69	3335	435	3.96
12650	2800	3010	393	3.46	3120	408	3.68	3260	426	4.07	3370	440	4.35	3490	455	4.63
13550	3000	3170	413	4.13	3300	430	4.46	3440	448	4.80	3530	460	5.10	3640	475	5.45

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
4520	1000	2800	366	1.06												
4970	1100	2780	363	1.16	2990	390	1.20									
5420	1200	2780	363	1.25	2975	388	1.43	3345	436	1.79						
5880	1300	2780	363	1.36	2975	388	1.56	3335	435	1.95	3660	478	2.34			
6330	1400	2800	365	1.46	2970	387	1.65	3335	435	2.09	3660	477	2.54	3960	516	2.97
6780	1500	2820	368	1.63	2990	390	1.81	3330	434	2.23	3640	475	2.69	3950	515	3.12
7240	1600	2865	374	1.79	3020	394	2.00	3330	434	2.39	3630	474	2.86	3940	513	3.33
7680	1700	2900	378	1.94	3050	398	2.13	3345	436	2.57	3640	475	3.05	3940	513	3.54
8140	1800	2940	383	2.13	3090	403	2.34	3375	440	2.78	3650	476	3.24	3940	513	3.76
8600	1900	2980	389	2.29	3130	408	2.54	3420	446	3.02	3680	480	3.50	3950	515	4.00
9050	2000	3045	397	2.53	3200	415	2.75	3450	450	3.21	3710	484	3.76	4010	523	4.33
9950	2200	3170	413	3.02	3300	430	3.30	3540	461	3.80	3790	494	4.32	4020	525	4.80
10850	2400	3305	431	3.60	3420	446	3.80	3640	475	4.34	3870	505	4.87	4090	534	5.40
11750	2600	3450	450	4.22	3575	466	4.42	3760	490	4.97	3980	519	5.59	4180	545	6.15
12650	2800	3590	468	4.95	3700	482	5.22	3890	507	5.78	4090	534	6.35	4290	560	7.05
13550	3000	3740	488	5.77	3835	500	6.03	4025	525	6.65	4220	551	7.30	4410	575	7.95
14450	3200	3910	510	6.70	3990	520	7.05	4180	545	7.60	4370	570	8.30	4520	590	9.05
15350	3400	4070	532	7.65	4140	540	7.90	4225	564	8.65	4510	588	9.40	4680	610	10.2
16300	3600	4230	554	8.80	4320	565	9.15	4495	586	10.0	4650	607	10.6	4830	630	11.5
17200	3800	4400	575	10.00	4480	586	10.50	4650	606	11.1	4800	627	12.0	4950	646	12.7
18100	4000	4560	596	11.40	4650	609	11.80	4820	630	12.6	4950	646	13.4	5000	653	14.4
19000	4200	4730	618	12.9	4800	627	13.3	4970	650	14.1	5120	667	15.1	5260	687	15.8
19900	4400	4910	641	14.5	4980	650	14.9	5130	670	15.8	5280	690	17.0	5430	708	16.9
20800	4600	5050	660	16.0	5130	670	16.6	5280	690	17.5	5450	712	18.4	5580	728	19.5

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
6780	1500	4260	553	3.64												
7240	1600	4210	549	3.76	4480	585	4.30									
7680	1700	4210	549	4.10	4480	585	4.60	4720	615	5.10						
8140	1800	4210	549	4.30	4450	581	4.80	4720	615	5.40	4960	647	6.05			
8600	1900	4210	549	4.50	4450	581	5.10	4720	615	5.70	4940	644	6.26	5170	675	6.80
9050	2000	4220	550	4.75	4460	582	5.35	4700	613	6.00	4940	644	6.60	5150	673	7.10
9950	2200	4240	553	5.32	4470	583	6.00	4710	612	6.60	4920	641	7.25	5140	671	7.90
10850	2400	4320	563	6.05	4520	590	6.70	4730	617	7.25	4950	645	7.95	5140	671	8.50
11750	2600	4400	574	6.85	4600	600	7.40	4800	625	8.10	4990	650	8.75	5180	676	9.40
12650	2800	4480	585	7.65	4680	611	8.30	4850	632	8.90	5060	660	9.75	5220	681	10.4
13550	3000	4580	598	8.70	4760	622	9.30	4930	643	9.85	5140	670	10.7	5300	691	11.4
14450	3200	4700	614	9.60	4880	636	10.4	5050	658	11.1	5220	681	11.9	5380	702	12.6
15350	3400	4830	630	10.7	5000	652	11.5	5150	672	12.3	5330	695	13.0	5370	713	13.7
16300	3600	4970	648	12.0	5120	668	13.0	5270	688	13.6	5430	708	14.4	5580	728	15.3
17200	3800	5100	666	13.5	5250	686	14.4	5400	705	15.2	5550	724	16.0	5680	741	16.7
18100	4000	5260	686	15.1	5400	705	15.9	5540	722	16.8	5676	740	17.5	5810	759	18.5
19000	4200	5400	705	16.9	5520	721	17.6	5680	741	18.5	5830	760	19.5	5950	776	20.5
19900	4400	5550	725	18.7	5700	742	19.4	5830	760	20.4	5950	776	21.4	6100	795	22.2
20800	4600	5720	748	19.8	5840	762	21.6	5980	780	22.4	6100	795	23.5	6200	810	24.5
21700	4800	5880	770	22.5	6020	781	23.5	6140	800	23.6	6260	816	25.7	6360	830	26.4
22600	5000	6050	781	25.0	6150	805	26.0	6290	820	27.0	6435	835	28.1	6500	850	29.2
23500	5200	6200	812	27.4	6320	827	28.5	6440	840	29.4	6560	855	30.4	6670	870	31.5
24400	5400	6360	831	29.8	6480	848	30.8	6620	865	32.0	6640	865	33.3	6820	890	34.3
25300	5600	6520	852	32.3	6660	870	34.0	6760	885	34.8	6865	895	36.1	6970	910	37.2
26200	5800	6700	876	36.0	6830	892	37.0	6940	906	37.8	7020	915	39.0	7150	930	40.5
27100	6000	6870	897	38.5	7020	915	40.6	7100	925	41.0	7230	943	42.8	7270	948	43.2
28000	6200	7020	915	41.5	7130	930	42.8	7270	947	44.3	7370	960	46.0	7440	970	47.0
28900	6400	7200	940	45.0	7300	950	46.5	7450	970	48.0	7500	980	49.2	7600	990	50.6

TYPE BW-60 BELTED CENTRIFUGAL FAN

WHEEL DIA. 32" OUTLET AREA 5.43 SQUARE FEET SINGLE WIDTH SINGLE INLET

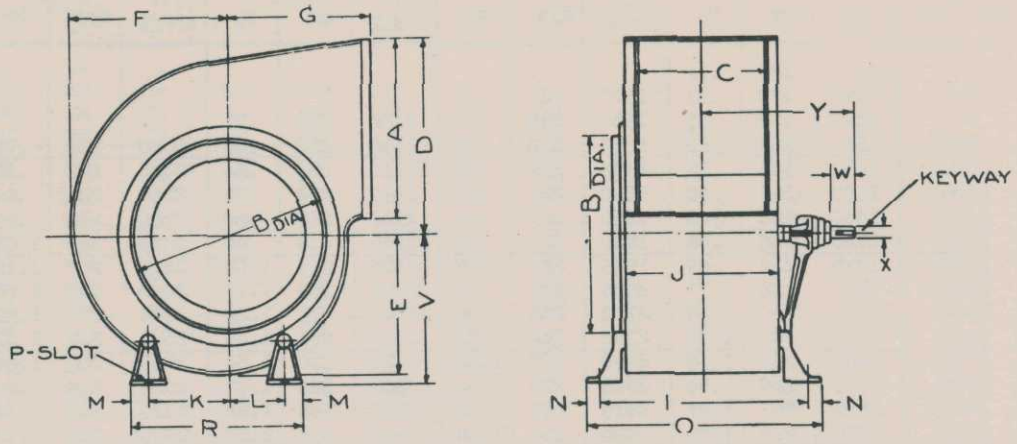
Cfm	OUTLET VELOCITY	1/4" STATIC			3/8" STATIC			1/2" STATIC			5/8" STATIC			3/4" STATIC		
		TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp	TIP SPEED	Rpm	Hp
2720	500	1510	180	.18												
3260	600	1490	178	.21	1870	221	.33									
3800	700	1490	178	.25	1855	219	.37	2135	255	.51						
4350	800	1515	181	.29	1850	218	.42	2130	253	.59	2390	285	.72			
4900	900	1550	185	.35	1855	219	.49	2110	252	.64	2365	282	.80	2600	310	.98
5430	1000	1590	191	.40	1890	222	.55	2110	252	.70	2360	281	.89	2580	308	1.07
5980	1100	1660	198	.48	1900	227	.65	2135	255	.80	2360	281	.97	2580	308	1.17
6520	1200	1720	205	.56	1940	232	.71	2160	258	.90	2375	283	1.07	2580	308	1.27
7070	1300	1775	212	.66	1995	238	.82	2000	263	1.03	2410	287	1.19	2605	311	1.40
7610	1400	1890	222	.77	2060	246	.95	2250	269	1.14	2440	291	1.35	2640	315	1.57
8150	1500	1930	230	.89	2120	253	1.08	2295	274	1.26	2490	297	1.49	2665	318	1.70
8700	1600	2010	240	1.03	2195	262	1.22	2360	281	1.40	2530	302	1.62	2710	323	1.87
9250	1700	2080	249	1.18	2260	270	1.39	2430	290	1.58	2590	309	1.84	2760	329	2.08
9800	1800	2170	259	1.36	2340	279	1.56	2500	298	1.77	2650	316	2.00	2810	334	2.24
10300	1900	2235	267	1.51	2410	288	1.76	2555	305	1.98	2710	323	2.24	2860	341	2.45
10880	2000	2330	278	1.72	2490	298	1.99	2650	316	2.22	2790	333	2.48	2920	348	2.72
11950	2200	2400	287	2.02	2650	316	2.46	2800	334	2.75	2925	349	2.98	3050	364	3.26
13050	2400	2660	318	2.72	2800	335	3.00	2940	351	3.32	3075	367	3.60	3200	382	3.88
14150	2600	2830	338	3.32	2970	355	3.69	3110	372	4.05	3220	385	4.36	3350	400	4.68

Cfm	OUTLET VELOCITY	7/8" STATIC			1" STATIC			1 1/4" STATIC			1 1/2" STATIC			1 3/4" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
5430	1000	2820	335	1.27												
5980	1100	2780	332	1.37	3000	358	1.59									
6520	1200	2790	333	1.47	2985	356	1.71	3350	400	2.15						
7070	1300	2800	334	1.63	2975	355	1.85	3330	398	2.30	3680	439	2.80			
7610	1400	2800	334	1.75	2990	357	1.99	3330	398	2.47	3660	437	3.00	3970	474	3.50
8150	1500	2840	339	1.93	3000	358	2.14	3320	397	2.62	3655	436	3.17	3950	471	3.70
8700	1600	2860	341	2.09	3035	362	2.34	3330	398	2.84	3655	436	3.38	3940	470	4.00
9250	1700	2920	348	2.36	3070	366	2.54	3370	402	3.07	3655	436	3.65	3950	471	4.10
9800	1800	2970	354	2.52	3090	369	2.83	3390	405	3.33	3670	438	3.87	3960	472	4.48
10300	1900	3000	358	2.70	3140	375	3.00	3440	410	3.56	3690	440	4.10	3960	472	4.65
10880	2000	3050	364	2.96	3210	383	3.26	3470	414	3.84	3730	445	4.40	3980	475	5.07
11950	2200	3170	378	3.51	3310	395	3.82	3560	425	4.41	3770	450	4.95	4030	481	5.68
13050	2400	3310	395	4.17	3430	409	4.12	3660	437	5.13	3880	463	5.75	4110	490	6.45
14150	2600	3470	414	4.96	3580	427	5.32	3770	450	5.90	3990	476	6.60	4210	502	7.25
15200	2800	3600	430	5.75	3700	442	6.13	3900	465	6.80	4110	490	7.45	4300	513	8.25
16300	3000	3790	452	6.80	3855	460	7.12	4065	485	7.70	4230	505	8.50	4420	527	9.30
17400	3200	3910	467	7.98	4020	480	8.20	4210	502	9.00	4370	522	9.75	4570	545	10.6
18500	3400	4070	486	9.15	4170	498	9.60	4360	519	10.2	4530	540	11.0	4690	560	11.8
19600	3600	4230	506	10.50	4320	516	10.95	4500	538	11.9	4690	560	12.6	4840	578	13.4
20700	3800	4400	526	12.00	4480	536	12.50	4660	557	13.5	4820	576	14.4	4985	595	15.0
21800	4000	4560	545	13.60	4650	556	14.10	4820	576	15.1	4980	595	16.2	5145	614	16.8

Cfm	OUTLET VELOCITY	2" STATIC			2 1/4" STATIC			2 1/2" STATIC			2 3/4" STATIC			3" STATIC		
		T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp	T.S.	Rpm	Hp
8150	1500	4255	508	4.30												
8700	1600	4230	505	4.08	4485	535	5.18									
9250	1700	4225	504	4.90	4485	535	5.44	4735	565	6.10						
9800	1800	4220	503	5.10	4470	533	5.80	4735	565	6.43	4960	592	7.15			
10300	1900	4230	505	5.40	4475	534	6.00	4720	563	6.70	4960	592	7.40	5190	620	8.20
10880	2000	4230	505	5.70	4475	534	6.37	4720	563	7.15	4945	590	7.80	5170	617	8.60
11950	2200	4250	507	6.30	4485	535	7.05	4735	565	7.80	4945	590	8.60	5160	616	9.50
13050	2400	4340	517	7.20	4550	543	7.90	4750	567	8.60	4945	590	9.40	5155	615	10.2
14150	2600	4415	527	8.00	4630	552	8.85	4800	573	9.50	5000	597	10.4	5180	618	11.2
15200	2800	4500	537	9.00	4700	561	9.75	4895	584	10.6	5070	605	11.5	5260	628	12.3
16300	3000	4610	550	10.0	4790	572	10.9	4960	592	11.8	5145	614	12.8	5320	635	13.6
17400	3200	4720	563	11.4	4900	585	12.2	5060	604	13.0	5245	626	14.0	5405	645	15.0
18500	3400	4845	578	12.7	5010	598	13.7	5170	617	14.5	5320	635	15.3	5490	655	16.1
19600	3600	4985	595	14.2	5140	613	15.1	5285	631	16.1	5445	650	17.0	5590	667	17.8
20700	3800	5130	612	16.0	5270	629	16.6	5420	647	18.0	5555	663	18.5	5720	683	19.8
21800	4000	5285	631	18.0	5415	646	18.6	5550	662	19.6	5715	682	20.7	5830	696	21.7
22800	4200	5420	647	19.6	5570	665	20.7	5700	680	21.6	5830	696	22.1	5950	710	23.4
23900	4400	5595	668	21.8	5720	683	22.9	5865	700	23.9	5980	714	25.1	6085	726	26.9
25000	4600	5720	683	23.8	5865	700	25.1	6000	716	26.3	6115	730	27.5	6240	745	28.5
26100	4800	5880	703	27.0	6020	718	27.7	6160	735	29.0	6290	751	30.7	6395	763	31.2
27200	5000	6050	723	29.8	6150	736	31.0	6285	750	31.5	6435	768	33.0	6560	783	34.0
28300	5200	6200	742	32.7	6320	756	33.9	6450	770	35.3	6575	785	36.0	6700	800	37.0
29400	5400	6360	760	35.7	6480	775	36.9	6620	791	38.4	6740	805	40.0	6870	820	41.0

DIMENSIONS—ILG TYPE "BW" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

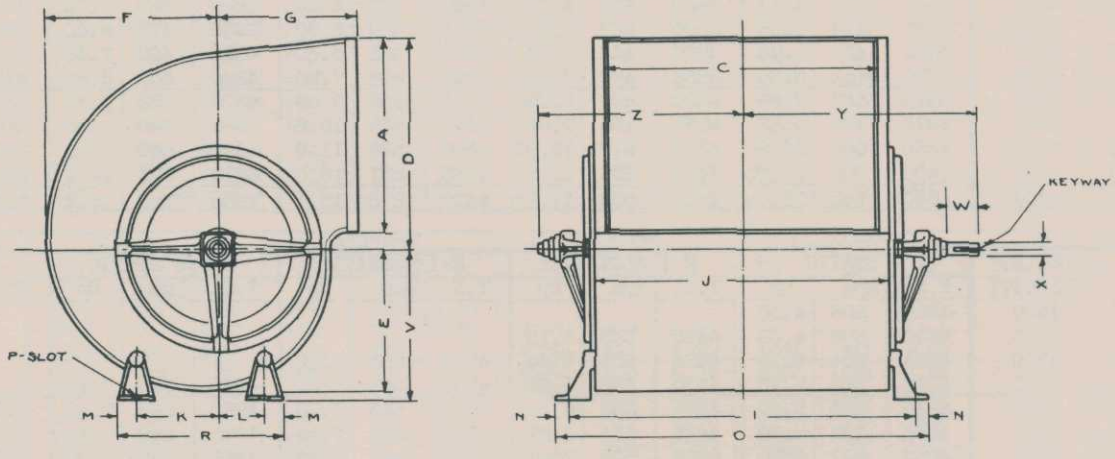


Fan is shown for discharge 1F-24C-46W-57W. Pulley is on opposite side for discharge 2F-23C-45W-58W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14⅛	10	11¾	10⅛	14¼	10¼	6	3¾	1¼	¾	15¾	⅝	12¼	10½	3⅝	1⅜₁₆	12½	3/16x3/32	95
30	16	16	11	17⅜	12⅛	14¼	12	17	12½	7¼	4½	1½	1	19	⅝	14¾	12¾	3¹¹⁄₁₆	1⅜₁₆	13⅝	3/16x3/32	140
35	19	19	13	20½	14¼	16¾	14	19¾	14¾	8½	5¼	1¾	1⅛	22	⅝	17¼	14¾	4⅜₁₆	1⅜₁₆	16	3/16x3/32	170
40	22	22	15	23⅝	16⅜	19¼	16	22½	17	9¾	6¼	2	1⅜	25¼	¾	20	17	4¼	1⅜₁₆	17⅝	3/16x3/32	250
45	25	25	17	26¾	18½	21¾	18	25¼	19⅛	11	7	2¼	1⅝	28½	¾	22½	19	5	1¹¹⁄₁₆	19¹³⁄₁₆	⅜x3/16	330
50	28	28	19	29⅞	20⅝	24¼	20	28¼	21⅜	12½	8	2½	1¾	31¾	⅞	25½	21	5	1¹¹⁄₁₆	21⅛	⅜x3/16	400
55	31	31	21	33	22¾	26¾	22	31	23⅝	13¾	8½	2¾	2	35	⅞	27¾	23½	5⅝	1¹¹⁄₁₆	23	⅜x3/16	475
60	34	34	23	36⅛	24⅞	29¼	24	33¾	25⅞	15	9½	3	2¼	38¼	1	30½	25½	5¹¹⁄₁₆	1¹¹⁄₁₆	25	⅜x3/16	890

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 1F-24C-46W-57W. Pulley is on opposite side for discharge 2F-23C-45W-58W

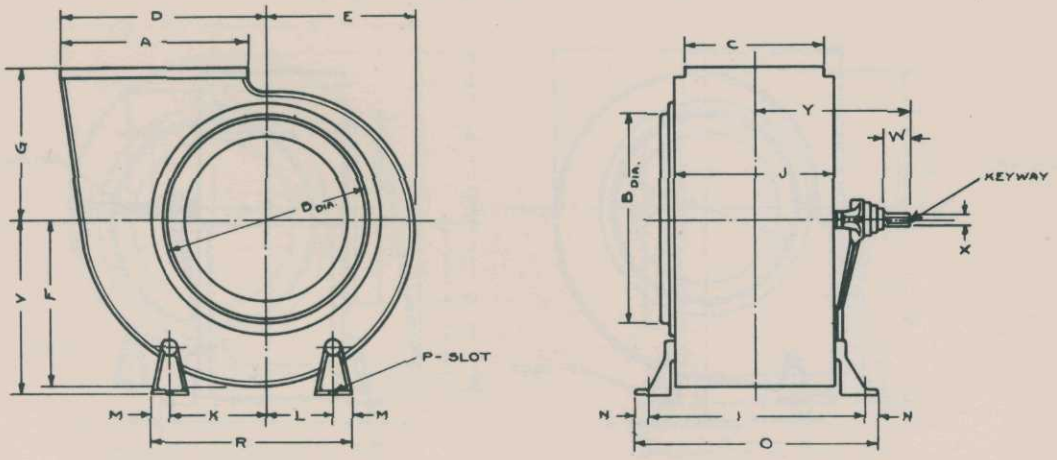
DIMENSIONS IN INCHES

Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26½	28	38	29⅞	20⅝	24¼	20	47¼	40⅜	12½	8	2½	1¾	50¾	⅞	25½	21	7	1¹¹⁄₁₆	32¼	⅜x3/16	26	600
55	29¼	31	42	33	22¾	26¾	22	52	44⅝	13¾	8½	2¾	2	56	⅞	27¾	23½	8½	1¹¹⁄₁₆	36	⅜x3/16	28	700
60	32	34	46	36⅛	24⅞	29¼	24	56¾	48⅞	15	9½	3	2¼	61¼	1	30½	25½	9¹³⁄₁₆	1¹¹⁄₁₆	40	⅜x3/16	31	1150

See page 2 for discharge arrangement numbers.

DIMENSIONS—ILG TYPE "BW" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

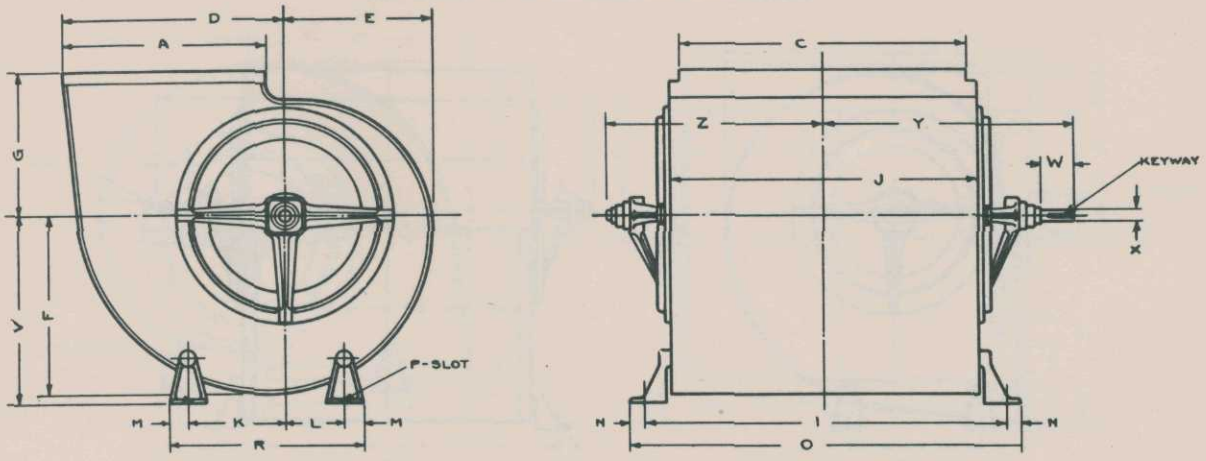


Fan is shown for discharge 6F-27C-44W-51W. Pulley is on opposite side for discharge 5F-28C-43W-52W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14⅛	10	11¾	10⅞	14¼	10¼	6½	4¼	1¼	¾	15¾	⅝	13¼	12¼	3⅝	1⅜6	12½	3⁄16x3⁄32	95
30	16	16	11	17⅜	12⅛	14¼	12	17	12½	8	5¼	1½	1	19	⅝	16¼	14¾	3 11⁄16	1⅜6	13⅝	3⁄16x3⁄32	140
35	19	19	13	20½	14¼	16¾	14	19¾	14¾	9	6	1¾	1⅛	22.	⅝	18½	17¼	4⅜6	1⅜6	16	3⁄16x3⁄32	170
40	22	22	15	23⅝	16⅜	19¼	16	22½	17	10¾	7	2	1⅜	25¼	¾	21¾	20	4¼	1⅜6	17⅝	3⁄16x3⁄32	250
45	25	25	17	26¾	18½	21¾	18	25¼	19⅛	12	8	2¼	1⅝	28½	¾	24½	22¼	5	1 1⁄16	19 13⁄16	3⁄8x3⁄16	330
50	28	28	19	29⅞	20⅝	24¼	20	28¼	21⅜	13½	8¾	2½	1¾	31¾	⅞	27¼	24¾	5	1 1⁄16	21⅛	3⁄8x3⁄16	400
55	31	31	21	33	22¾	26¾	22	31	23⅝	15	9¾	2¾	2	35	⅞	30¼	27¼	5⅝	1 1⁄16	23	3⁄8x3⁄16	475
60	34	34	23	36⅛	24⅞	29¼	24	33¾	25⅞	16	10½	3	2¼	38¼	1	32½	30	5 11⁄16	1 1⁄16	25	3⁄8x3⁄16	890

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 6F-27C-44W-51W. Pulley is on opposite side for discharge 5F-28C-43W-52W

DIMENSIONS IN INCHES

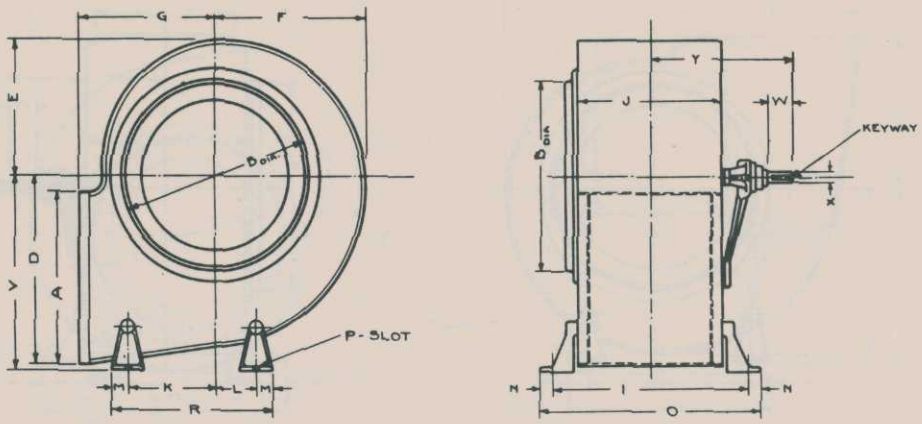
Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26½	28	38	29⅞	20⅝	24¼	20	47¼	40⅜	13½	8¾	2½	1¾	50¾	⅞	27¼	24¾	7	1 1⁄16	32¼	3⁄8x3⁄16	26	600
55	29¼	31	42	33	22¾	26¾	22	52	44⅝	15	9¾	2¾	2	56	⅞	30¼	27½	8½	1 1⁄16	36	3⁄8x3⁄16	28	700
60	32	34	36	36⅛	24⅞	29¼	24	56¾	48⅞	16¼	10½	3	2¼	61¼	1	32¾	30	9 13⁄16	1 1⁄16	40	3⁄8x3⁄16	31	1150

NOTE—Wheel dia. BC25 12¼"; BC30 15".

See page 2 for discharge arrangement numbers.

DIMENSIONS—ILG TYPE "BW" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

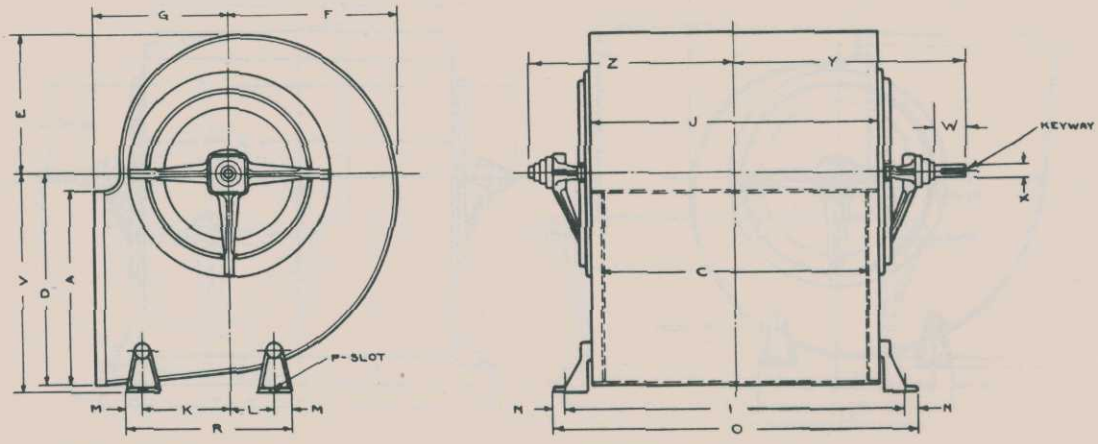


Fan is shown for discharge 4F-21C-47W-56W. Pulley is on opposite side for discharge 3F-22C-48W-55W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14 1/8	10	11 3/4	10 1/8	14 1/4	10 1/4	6 3/4	3 1/4	1 1/4	3/4	15 3/4	5/8	12 1/2	14 5/8	3 5/8	1 3/16	12 1/2	3/16 x 3/32	95
30	16	16	11	17 3/8	12 1/8	14 1/4	12	17	12 1/2	8 1/4	4	1 1/2	1	19	5/8	15 1/4	17 3/4	3 11/16	1 3/16	13 5/8	3/16 x 3/32	140
35	19	19	13	20 1/2	14 1/4	16 3/4	14	19 3/4	14 3/4	9 1/2	4 1/2	1 3/4	1 1/8	22	5/8	17 1/2	21	4 3/16	1 3/16	16	3/16 x 3/32	170
40	22	22	15	23 5/8	16 3/8	19 1/4	16	22 1/2	17	11	5	2	1 3/8	25 1/4	3/4	20	24 1/4	4 1/4	1 3/16	17 5/8	3/16 x 3/32	250
45	25	25	17	26 3/4	18 1/2	21 3/4	18	25 1/4	19 1/8	12 1/2	5	2 1/4	1 5/8	28 1/2	3/4	22	27 1/4	5	1 11/16	19 13/16	3/8 x 3/16	330
50	28	28	19	29 7/8	20 5/8	24 1/4	20	28 1/4	21 3/8	14	6	2 1/2	1 3/4	31 3/4	7/8	25	30 1/2	5	1 11/16	21 1/8	3/8 x 3/16	400
55	31	31	21	33	22 3/4	26 3/4	22	31	23 5/8	15	6	2 3/4	2	35	7/8	26 1/2	33 3/4	5 5/8	1 11/16	23	3/8 x 3/16	475
60	34	34	23	36 1/8	24 7/8	29 1/4	24	33 3/4	25 7/8	17	7	3	2 1/4	38 1/4	1	30	36 3/4	5 11/16	1 11/16	25	3/8 x 3/16	890

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 4F-21C-47W-56W. Pulley is on opposite side for discharge 3F-22C-48W-55W

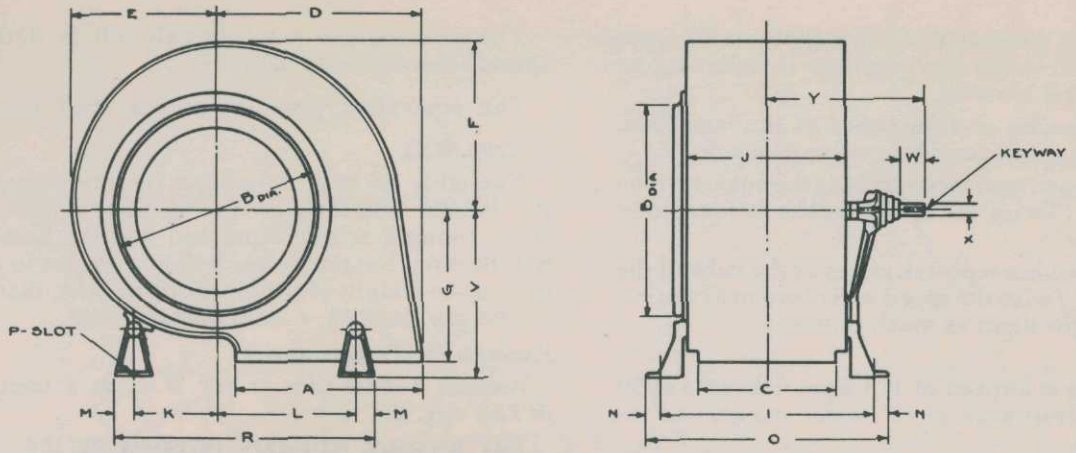
DIMENSIONS IN INCHES

Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26 1/2	28	38	29 7/8	20 5/8	24 1/4	20	47 1/4	40 3/8	14	6	2 1/2	1 3/4	50 3/4	7/8	25	30 1/2	7	1 11/16	32 1/4	3/8 x 3/16	26	600
55	29 1/4	31	42	33	22 3/4	26 3/4	22	52	44 5/8	15	6	2 3/4	2	56	7/8	26 1/2	33 3/4	8 1/2	1 11/16	36	3/8 x 3/16	28	700
60	32	34	46	36 1/8	24 7/8	29 1/4	24	56 3/4	48 7/8	17	7	3	2 1/4	61 1/4	1	30	36 3/4	9 5/8	1 11/16	40	3/8 x 3/16	31	1150

See page 2 for discharge arrangement numbers.

DIMENSIONS—ILG TYPE "BW" CENTRIFUGAL FANS

BELTED TYPE—SINGLE WIDTH, SINGLE INLET

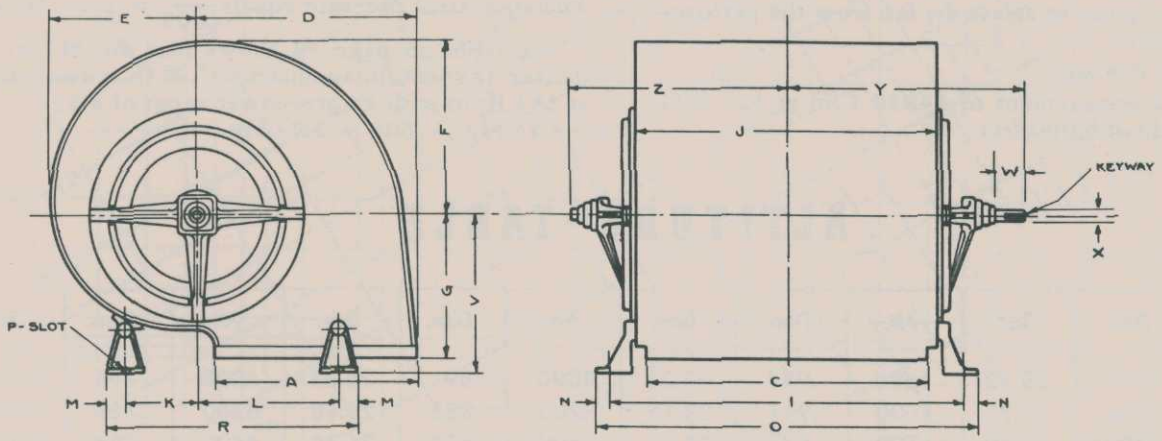


Fan is shown for discharge 7F-26C-41W-54W. Pulley is on opposite side for discharge 8F-25C-42W-53W

DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Keyway	Ship. Wt., Lbs.
25	13	13	9	14 1/8	10	11 3/4	10 1/8	14 1/4	10 1/4	5 1/4	10	1 1/4	3/4	15 3/4	5/8	17 3/4	10 3/4	3 5/8	1 3/16	12 1/2	3/16x3/32	95
30	16	16	11	17 3/8	12 1/8	14 1/4	12	17	12 1/2	7	12	1 1/2	1	19	5/8	22	12 1/2	3 11/16	1 3/16	13 5/8	3/16x3/32	140
35	19	19	13	20 1/2	14 1/4	16 3/4	14	19 3/4	14 3/4	8 1/2	14	1 3/4	1 1/8	22	5/8	26	14 1/2	4 3/16	1 3/16	16	3/16x3/32	170
40	22	22	15	23 5/8	16 3/8	19 1/4	16	22 1/2	17	10	16 1/2	2	1 3/8	25 1/4	3/4	30 1/2	16 1/2	4 1/4	1 3/16	17 5/8	3/16x3/32	250
45	25	25	17	26 3/4	18 1/2	21 3/4	18	25 1/4	19 1/8	10 3/4	18 1/2	2 1/4	1 5/8	28 1/2	3/4	33 3/4	18 3/4	5	1 11/16	19 13/16	3/8x3/16	330
50	28	28	19	29 7/8	20 5/8	24 1/4	20	28 1/4	21 3/8	12 3/4	21	2 1/2	1 3/4	31 3/4	7/8	38 3/4	20 1/2	5	1 11/16	21 1/8	3/8x3/16	400
55	31	31	21	33	22 3/4	26 3/4	22	31	23 5/8	14	23	2 3/4	2	35	7/8	42 1/2	22 1/2	5 3/8	1 11/16	23	3/8x3/16	475
60	34	34	23	36 1/8	24 7/8	29 1/4	24	33 3/4	25 7/8	15 3/4	25	3	2 1/4	38 1/4	1	46 3/4	24 1/2	5 11/16	1 11/16	25	3/8x3/16	890

BELTED TYPE—DOUBLE WIDTH, DOUBLE INLET



Fan is shown for discharge 7F-26C-41W-54W. Pulley is on opposite side for discharge 8F-25C-42W-53W

DIMENSIONS IN INCHES

Size	Wheel Dia.	A	C	D	E	F	G	I	J	K	L	M	N	O	P	R	V	W	X	Y	Key-way	Z	Ship. Wt., Lbs.
50	26 1/2	28	38	29 7/8	20 5/8	24 1/4	20	47 1/4	40 3/8	12 3/4	21	2 1/2	1 3/4	50 3/4	7/8	38 3/4	20 1/2	7	1 11/16	32 1/4	3/8x3/16	26	600
55	29 1/4	31	42	33	22 3/4	26 3/4	22	52	44 5/8	14	23	2 3/4	2	56	7/8	42 1/2	22 1/2	8 1/2	1 11/16	36	3/8x3/16	28	700
60	32	34	46	36 1/8	24 7/8	29 1/4	24	56 3/4	48 7/8	15 3/4	25	3	2 1/4	61 1/4	1	46 3/4	24 1/2	9 5/8	1 11/16	40	3/8x3/16	31	1150

See page 2 for discharge arrangement numbers.

GENERAL FAN PERFORMANCE LAWS

The following general Fan Laws apply to all types of fans, and will assist the engineer in selecting or applying fans and blowers.

(1) The air capacity or Cfm varies as the fan speed. (Twice the speed results in twice as much air.)

(2) The developed pressure varies as the square of the fan speed. (Twice the speed results in four times the pressure.)

(3) The required horsepower varies as the cube of the fan speed. (Twice the speed will result in a requirement of eight times as much power).

Example:

A fan running at a speed of 473 Rpm delivers 14850 Cfm against a resistance of ¾" water gauge, and requires 3.18 Hp.

If 16850 Cfm were required, what would be the speed, the pressure and horsepower?

Use the first law to find the required speed:

Speed equals $\frac{16850}{14850} \times 473$ equals 537 Rpm.

Use the second law to determine the pressure:

Pressure equals $\left(\frac{537}{473}\right)^2 \times .75$ equals .97" W.G.

Use the third law to determine the horsepower:

Horsepower equals $\left(\frac{537}{473}\right)^3 \times 3.18$ equals 4.67 Hp.

(4) If the air handled by the fan is of a different density than standard air, either due to temperature, barometric pressure or altitude, it becomes necessary to convert the conditions to standard air conditions in order to select the fan from the performance tables.

Example for Altitude:

Assume a requirement of 14850 Cfm at ¾" W.G. at an altitude of 5,000 feet.

The air density at 5,000 feet altitude is .826 (From altitude-density table below.)

The equivalent pressure at sea level equals $\frac{.75}{.826}$ = .908 W.G.

The table on page 49 shows by interpolation that the BC 80 will deliver 14850 Cfm at .908" W.G. when running at 486 Rpm and that the horsepower will be 3.63, but the power will be reduced in proportion to the weight of the air, or its density, therefore—

3.63 Hp. × .826 = 2.96 horsepower.

Example for Temperature:

Assume 14850 Cfm at ¾" W.G. at a temperature of 260 deg. F.

The pressure will vary inversely as the absolute temperature, therefore:

Density = $1 \times \frac{460 \text{ plus } 70}{460 \text{ plus } 260} = .736$

pressure equals $\frac{.75}{.736} = 1.02$" W.G.

The table on page 49 shows that the BC80 will deliver 14850 Cfm at 1.02" W.G. when running at 509 Rpm and that the horsepower will be 3.98, but the horsepower will be reduced according to the air density, therefore 3.98 Hp × .736 = 2.92 Hp.

Example for both temperature and altitude:

From the foregoing examples
Density for 5,000 feet altitude = .826
Density for 260 deg. F. temperature = .735
Density for both = .826 × .735 = .608

The equivalent pressure equals $\frac{.75}{.608} = 1.23$" W.G.

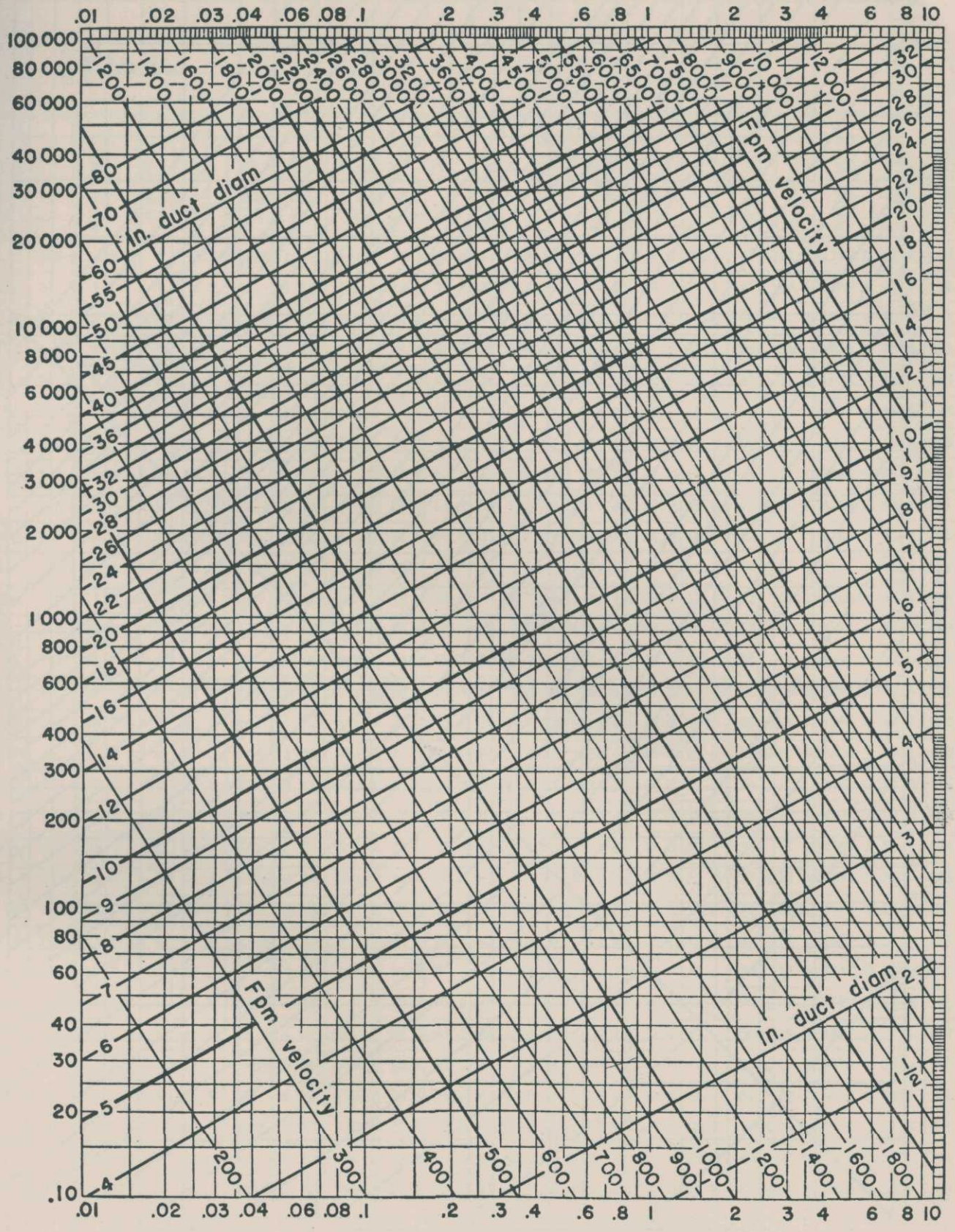
The table on page 49 shows that the BC 80 will deliver 14850 Cfm against 1.23" W.G. when running at 534 Rpm with a horsepower input of 4.55.

4.55 Hp × .608 = 2.77 Hp.

ALTITUDE TABLE

Alt.	Den.	Bar.	Alt.	Den.	Bar.	Alt.	Den.	Bar.	Alt.	Den.	Bar.
0	1.000	29.92	1500	.944	28.26	3000	.891	26.68	6000	.795	23.79
100	.966	29.81	1600	.941	28.15	3200	.885	26.48	6200	.789	23.61
200	.992	29.70	1700	.937	28.04	3400	.878	26.28	6400	.784	23.43
300	.989	29.58	1800	.933	27.93	3600	.872	26.08	6600	.778	23.26
400	.985	29.47	1900	.930	27.83	3800	.865	25.88	6800	.772	23.08
500	.981	29.36	2000	.926	27.72	4000	.858	25.68	7000	.766	22.90
600	.977	29.25	2100	.923	27.62	4200	.852	25.49	7200	.760	22.73
700	.974	29.14	2200	.919	27.51	4400	.846	25.30	7400	.754	22.56
800	.970	29.02	2300	.916	27.41	4600	.839	25.10	7600	.748	22.38
900	.966	28.91	2400	.912	27.30	4800	.833	24.91	7800	.743	22.21
1000	.962	28.80	2500	.909	27.20	5000	.826	24.72	8000	.737	22.04
1100	.959	28.69	2600	.905	27.09	5200	.820	24.53	8200	.731	21.87
1200	.955	28.58	2700	.902	26.99	5400	.814	24.35	8400	.726	21.70
1300	.952	28.47	2800	.898	26.89	5600	.808	24.16	8600	.720	21.54
1400	.948	28.36	2900	.895	26.78	5800	.802	23.98	8800	.714	21.37

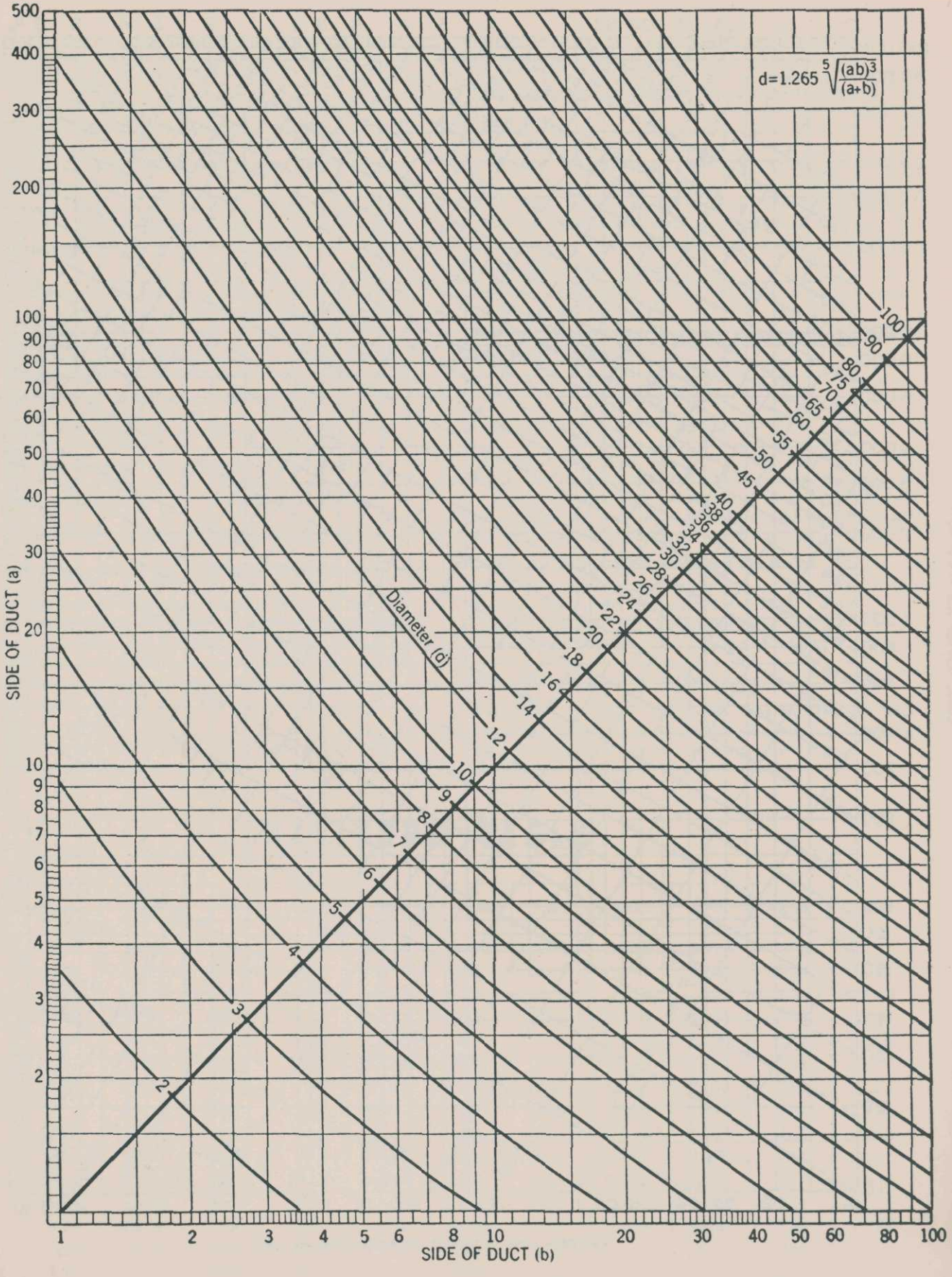
FRICTION OF AIR IN PIPE



NOTE—This graph is based on Standard Air at 29.921 In. of Mercury barometric pressure and 69.41 F. flowing through average, clean, round, galvanized metal ducts having approximately 40 joints per 100 ft. Caution: Do not extrapolate below chart.

Reprinted from the American Society of Heating and Ventilating Engineers Guide 1948, Chapter 41, Page 748.

RECTANGULAR EQUIVALENT OF ROUND DUCTS



Reprinted from the American Society of Heating and Ventilating Engineers Guide 1948, Chapter 41, Page 751.

AREAS AND CIRCUMFERENCES OF CIRCLES AND SIDES OF SQUARES OF THE SAME AREA

Diameter in Inches	Area of Circle in Square Feet	Area of Circle in Square Inches	Sides of Squares of Same Area in Inches	Circumference of Circle in Inches	Diameter in Inches	Area of Circle in Square Feet	Area of Circle in Square Inches	Sides of Squares of Same Area in Inches	Circumference of Circle in Inches	Diameter in Inches	Area of Circle in Square Feet	Area of Circle in Square Inches	Sides of Squares of Same Area in Inches	Circumference of Circle in Inches	Diameter in Inches	Area of Circle in Square Feet	Area of Circle in Square Inches	Sides of Squares of Same Area in Inches	Circumference of Circle in Inches
1	.005	.8	.9	3.1	16½	1.48	213.8	14.6	51.8	32	5.58	804.2	28.3	100.5	47½	12.31	1772.0	42.1	149.2
1½	.012	1.7	1.3	4.7	17	1.58	226.9	15.0	53.4	32½	5.75	829.5	28.8	102.1	48	12.55	1809.5	42.5	150.7
2	.022	3.1	1.7	6.2	17½	1.67	240.5	15.5	54.9	33	5.93	855.3	29.2	103.6	48½	12.85	1847.4	42.9	152.3
2½	.034	4.9	2.2	7.8	18	1.77	254.4	15.9	56.5	33½	6.11	881.4	29.6	105.2	49	13.10	1885.7	43.4	153.9
3	.049	7.0	2.6	9.4	18½	1.87	268.8	16.4	58.1	34	6.31	907.9	30.1	106.8	49½	13.40	1924.4	43.8	155.5
3½	.067	9.6	3.1	10.9	19	1.97	283.5	16.8	59.6	34½	6.47	934.8	30.5	108.3	50	13.65	1963.5	44.3	157.0
4	.087	12.5	3.5	12.5	19½	2.07	298.6	17.2	61.2	35	6.67	962.1	31.0	109.9	50½	13.95	2002.9	44.7	158.6
4½	.110	15.9	3.9	14.1	20	2.18	314.1	17.7	62.8	35½	6.87	989.8	31.4	111.5	51	14.20	2042.8	45.2	160.2
5	.136	19.6	4.4	15.7	20½	2.29	330.0	18.1	64.4	36	7.08	1017.8	31.9	113.0	51½	14.45	2083.0	45.6	161.7
5½	.165	23.7	4.8	17.2	21	2.41	346.3	18.6	65.9	36½	7.28	1046.3	32.3	114.6	52	14.75	2123.7	46.0	163.3
6	.196	28.2	5.3	18.8	21½	2.52	363.0	19.0	67.5	37	7.46	1075.2	32.7	116.2	52½	15.05	2164.7	46.5	164.9
6½	.230	33.1	5.7	20.4	22	2.64	380.1	19.5	69.1	37½	7.69	1104.4	33.2	117.8	53	15.35	2206.1	46.9	166.5
7	.268	38.4	6.2	21.9	22½	2.76	397.6	19.9	70.6	38	7.88	1134.1	33.6	119.3	53½	15.62	2248.0	47.4	168.0
7½	.306	44.1	6.6	23.5	23	2.84	415.4	20.3	72.2	38½	8.10	1164.1	34.1	120.9	54	15.92	2290.2	47.8	169.6
8	.350	50.2	7.0	25.1	23½	3.01	433.7	20.8	73.8	39	8.30	1194.5	34.5	122.5	54½	16.20	2332.8	48.3	171.2
8½	.393	56.7	7.5	26.7	24	3.14	452.3	21.2	75.3	39½	8.52	1225.4	35.0	124.0	55	16.45	2375.8	48.7	172.7
9	.442	63.6	7.9	28.2	24½	3.28	471.4	21.7	76.9	40	8.72	1256.6	35.4	125.6	55½	16.80	2419.2	49.1	174.3
9½	.493	70.8	8.4	29.8	25	3.41	490.8	22.1	78.5	40½	8.95	1288.2	35.8	127.2	56	17.10	2463.0	49.6	175.9
10	.545	78.5	8.8	31.4	25½	3.54	510.7	22.6	80.1	41	9.17	1320.2	36.3	128.8	56½	17.45	2507.1	50.0	177.5
10½	.600	86.5	9.3	32.9	26	3.69	530.9	23.0	81.6	41½	9.40	1352.6	36.8	130.3	57	17.72	2551.7	50.5	179.0
11	.660	95.0	9.7	34.5	26½	3.83	551.5	23.4	83.2	42	9.64	1385.4	37.2	131.9	57½	18.00	2596.7	50.9	180.6
11½	.722	103.8	10.1	36.1	27	3.98	572.5	23.9	84.8	42½	9.85	1418.6	37.6	133.5	58	18.35	2642.0	51.4	182.2
12	.785	113.1	10.6	37.6	27½	4.13	593.9	24.3	86.3	43	10.10	1452.2	38.1	135.0	58½	18.65	2687.8	51.8	183.7
12½	.852	122.7	11.0	39.2	28	4.28	615.7	24.8	87.9	43½	10.31	1486.1	38.5	136.6	59	18.95	2733.9	52.2	185.3
13	.922	132.7	11.5	40.8	28½	4.42	637.9	25.2	89.5	44	10.55	1520.5	38.9	138.2	59½	19.35	2780.5	52.7	186.9
13½	.994	143.1	11.9	42.4	29	4.59	660.5	25.7	91.1	44½	10.80	1555.2	39.4	139.8	60	19.65	2827.7	53.1	188.4
14	1.07	153.9	12.4	43.9	29½	4.74	683.4	26.1	92.6	45	11.05	1590.4	39.8	141.3	60½	19.95	2874.7	53.6	190.0
14½	1.15	165.1	12.8	45.5	30	4.92	706.8	26.5	94.2	45½	11.30	1625.9	40.3	142.9	61	20.39	2922.5	54.0	191.6
15	1.23	176.7	13.2	47.1	30½	5.07	730.6	27.0	95.8	46	11.55	1661.9	40.7	144.5	61½	20.62	2970.6	54.5	193.2
15½	1.31	188.6	13.7	48.6	31	5.23	754.7	27.4	97.3	46½	11.80	1698.2	41.2	146.0	62	20.95	3019.1	54.9	194.8
16	1.40	201.0	14.1	50.2	31½	5.42	779.3	27.9	98.9	47	12.10	1734.9	41.6	147.6	62½	21.32	3068.0	55.4	196.4

SAMPLE SPECIFICATIONS

Type "BC" ILG Direct-Connected Centrifugal Fans

Furnish a No.....Type"BC" ILG Direct-Connected Centrifugal Fan with No.....discharge and rotation..... The fan shall have a capacity of..... cubic feet per minute against.....inches static pressure at a speed of.....Rpm.

The fan wheel shall be of the backward curved blade type having a non-overloading power characteristic and constructed of welded steel. The overhung fan wheel shall be dynamically balanced and driven directly from the motor shaft. It shall be possible at any time to remove the wheel through the inlet by removing the inlet flange. The motor is to be partly recessed in the side of the blower housing and supported entirely by the housing itself with factory-set alignment. The fan inlet is to be free of any obstructions. The sides of the fan housing are to be constructed of cast aluminum (sheet steel sides on BC80 and BC90); the scroll of steel. The complete housing and motor are to be supported as a unit by four cast feet.

The complete fan, including the motor, is to be guaranteed as a unit by the manufacturer who is to assume undivided responsibility. The available electric circuit will be.....

Type "BC" ILG Belted Centrifugal Fans

Furnish a No.....Type "BC" ILG Belted Centrifugal Fan with No.....discharge and rotation. The fan shall have a capacity of.....cubic feet per minute against.....inches static pressure at a speed of.....Rpm.

The fan wheel shall be of the backward curved blade type having a non-overloading power characteristic and constructed of welded steel. It shall be dynamically balanced and overhung on a steel shaft running on two heavy duty grease lubricated ball bearings in a cast iron bracket mounted on the side of the blower. There is to be no obstruction of any kind in the fan inlet. It shall be possible at any time to remove the wheel through the inlet by removing the inlet flange.

The sides of the fan housing are to be constructed of cast aluminum (sheet steel sides on BC80 and BC90); the scroll of steel. The complete housing is to be mounted on four cast feet.

Floated Drive for Type "B" and Type "BC" ILG Direct-Connected Centrifugal Fans

Extra sound and vibration dampening facilities are to be provided by means of an ILG Floated Drive which is to isolate the motor and wheel as a unit on rubber without affecting in any way the position of the wheel within the housing.

Type "B" ILG Direct-Connected Centrifugal Fans

Furnish a No.....Type "B" ILG Direct-Connected Fan with No.....discharge and rotation. The fan shall have a capacity of.....cubic feet per minute against.....inches static pressure at a speed of .....Rpm.

The fan wheel is to be constructed with steel blades welded to steel rims and mounted on a cast steel spider. The wheel is to be dynamically balanced for smooth, quiet operation. The wheel is to be overhung and driven directly from the motor shaft. It shall be possible at any time to remove the wheel through the inlet by removing the inlet flange. The motor is to be partly recessed in the side of the fan housing and supported entirely by the housing itself with factory-set alignment. The fan inlet is to be entirely free of any obstruction.

The sides of the fan housing are to be constructed of cast aluminum; the scroll of steel. The complete housing and motor are to be supported as a unit by four cast feet.

The complete fan, including the motor, is to be guaranteed as a unit by the manufacturer who is to assume undivided responsibility. The available electrical current will be.....

Type "BW" ILG Belted Centrifugal Fans

Furnish a No.....Type "BW" ILG Belted Fan with No.....discharge and rotation. The fan shall have a capacity of.....cubic feet per minute against .....inches static pressure at a speed of.....Rpm.

The fan wheel is to be of the forward curved type with steel blades welded to steel rims and mounted on a cast steel spider. The fan wheel shall be dynamically balanced and overhung on a steel shaft running on two heavy duty grease lubricated ball bearings in a cast iron bracket mounted on the side of the fan.

There is to be no obstruction of any kind in the fan inlet. It shall be possible at any time to remove the wheel through the inlet by removing the inlet flange.

The sides of the fan housing are to be constructed of cast aluminum; the scroll of steel. The complete housing is to be mounted on four cast feet.

Variable Air Controller For ILG Type "B" and "BC" Direct-Connected and Type "BW" and "BC" Belted Centrifugal Fans

Air volume control is to be provided by means of an ILG Variable Air Controller mounted on the outlet side of the fan. Manual control is to be provided by means of a quadrant handle mounted on the side of the bank of vanes. (Remote control: Remote control is to be provided by means of a 180 degree motor operating on a 24-volt circuit and equipped with transformer and remote control switch.)

S. S. Panama

U. S. Coast Guard Cutter
Campbell
Official U. S. Coast Guard Photograph

Motor Ship
Donald McKay

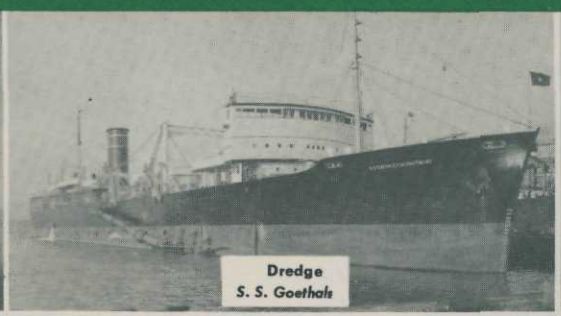
ILG

DIRECT-CONNECTED CENTRIFUGAL FANS

Save Space ★ Save Weight

ABOARD AMERICA'S SHIPS

The Grace Liner
Santa Paula



Dredge
S. S. Goethals

S. S. Delbrasil

U. S. A. T. General
Alexander M. Patch

Tanker
S. S. Esso Houston

V-4 Sea Going Tug
Sand Key

Yacht Sotavento
For use of the President of Mexico

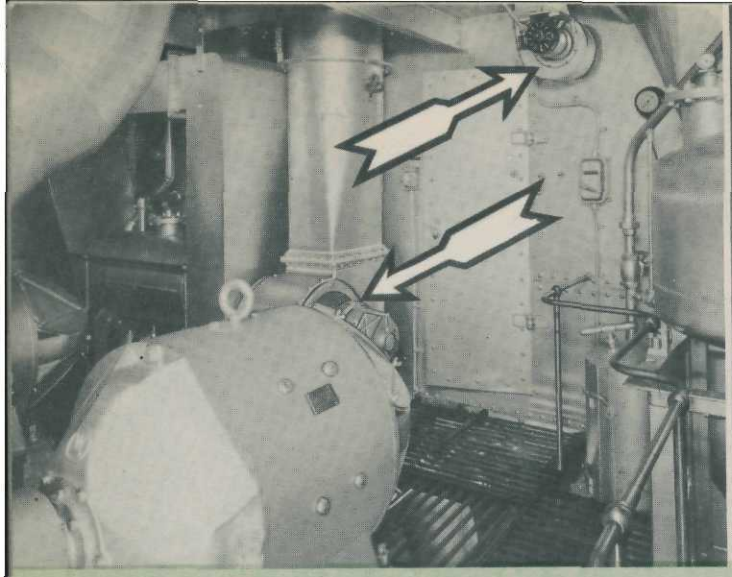
Lake Liner
Milwaukee Clipper

C-2 Cargo Boat
Red Jacket

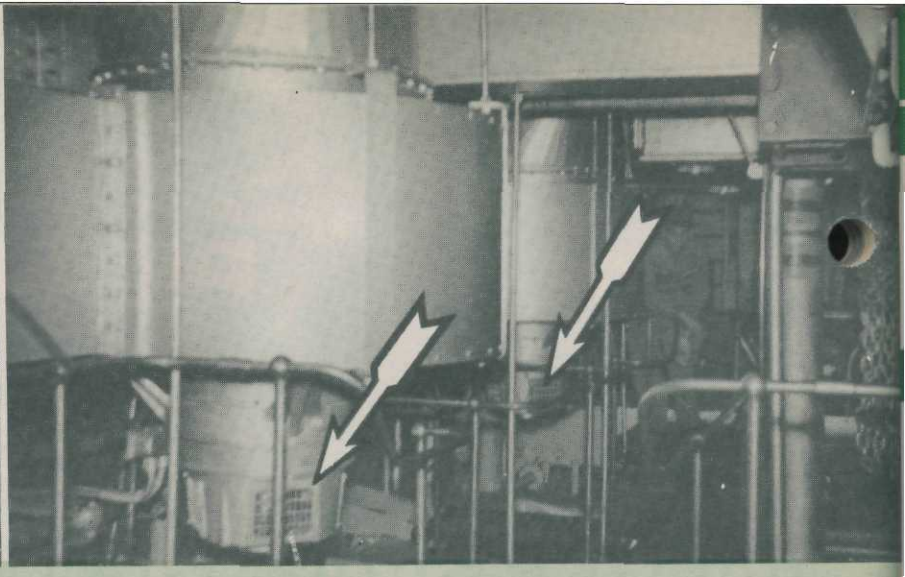
Luxury Liner
S. S. President Cleveland

New York City
Fire Fighter

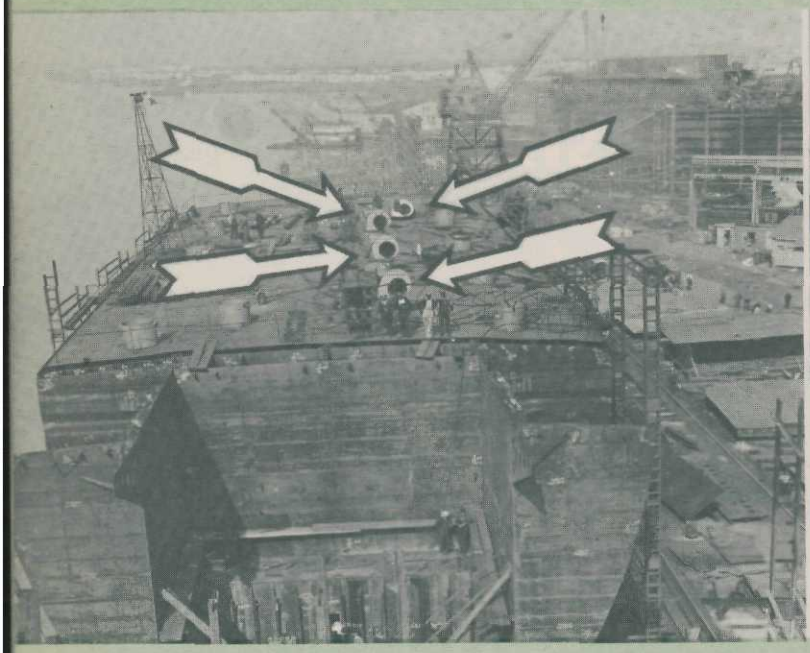
U. S. Destroyer
S. S. Kearny



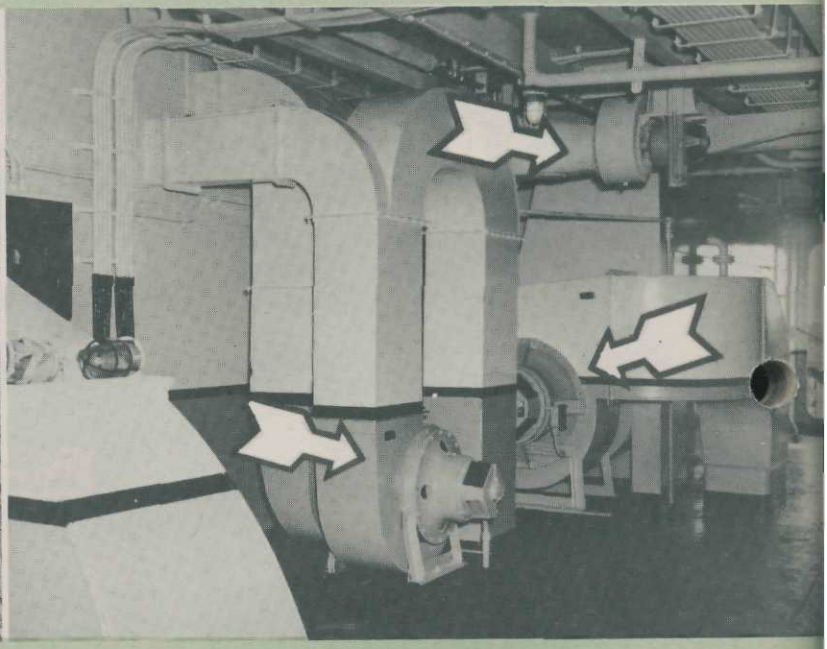
ILG Type "BC" Centrifugal Fans compactly installed in the hold of the *Robin Locksley* — note savings in space!



ILG Type "BC" Centrifugal Fans with motor shaft in vertical position — fan inlets on top — motor suspended directly from fan housing.

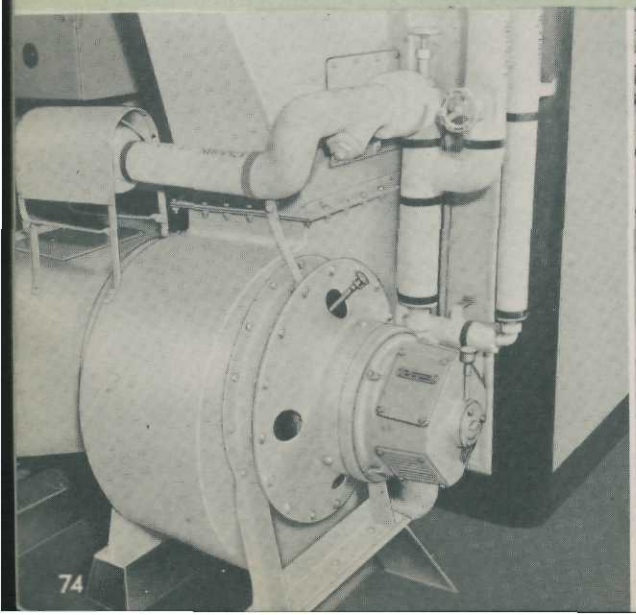


ILG Type "BC Centrifugal Fans force cool air down into the hold to give workers below deck relief from excessive heat and fumes.



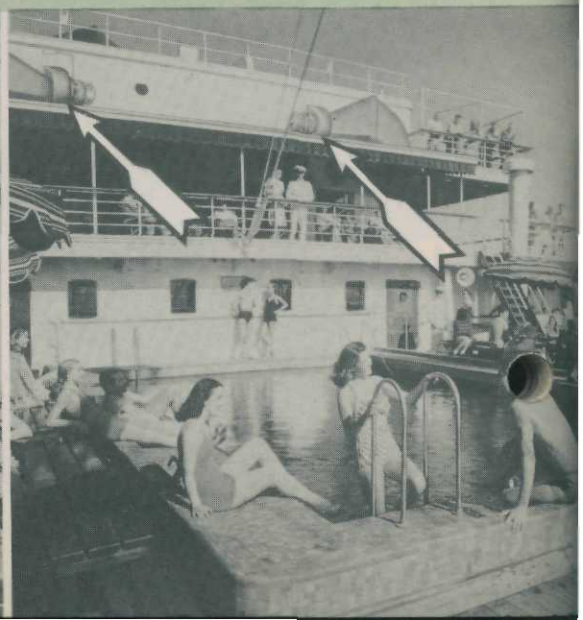
ILG Type "CC" Centrifugal Fans save space and weight in both deck and bulkhead mounting on a C-2 cargo ship.

(Below) No obstruction to passageway, here, due to compact construction of ILG Marine Fan.



(Below) ILG Marine Fans snugly, securely suspended from the deckhead of aircraft carrier.

(Below) ILG Marine Fans mounted compactly on deck of the luxury Grace Liner, *Santa Rosa*.



PROMINENT BUILDINGS EQUIPPED BY... ILG

Hotel Windermere, New York City

Chamber of Commerce Building, Brooklyn, N. Y.

Hotel Peabody, Memphis

Jacksonville Terminal, Jacksonville, Florida

(above) Industrial High School, Hammond, Indiana

(below) State Highway Building, Austin, Texas

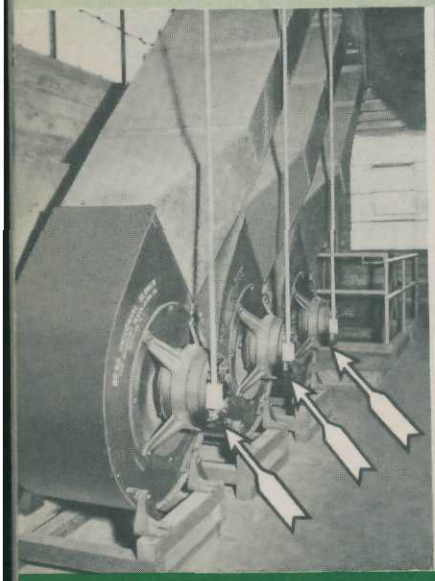
(below) 1400 Lake Shore Drive Apt. Bldg., Chicago

(above) Arnold Constable Building, New York City

(above) Baker Building, Minneapolis

(below) The Mission Inn, Riverside, California

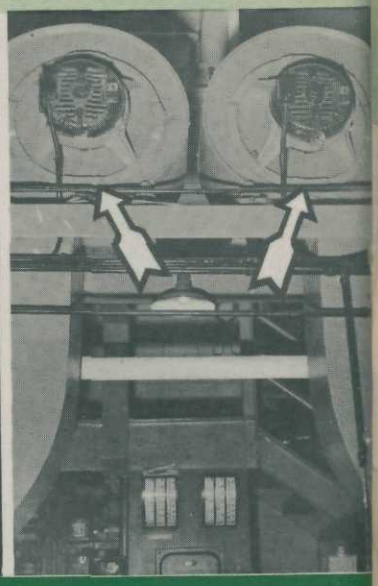
TYPICAL ILG SPACE-SAVING INSTALLATIONS



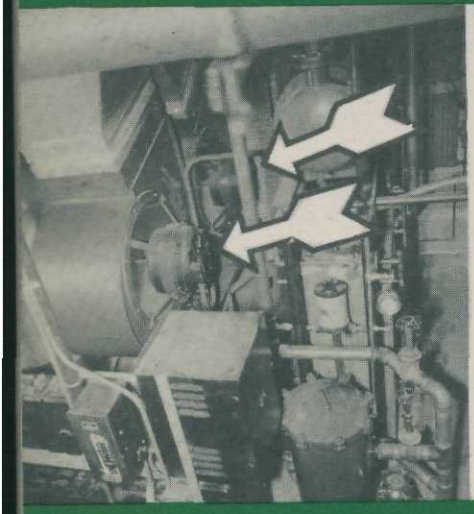
BREWERY

LABORATORY

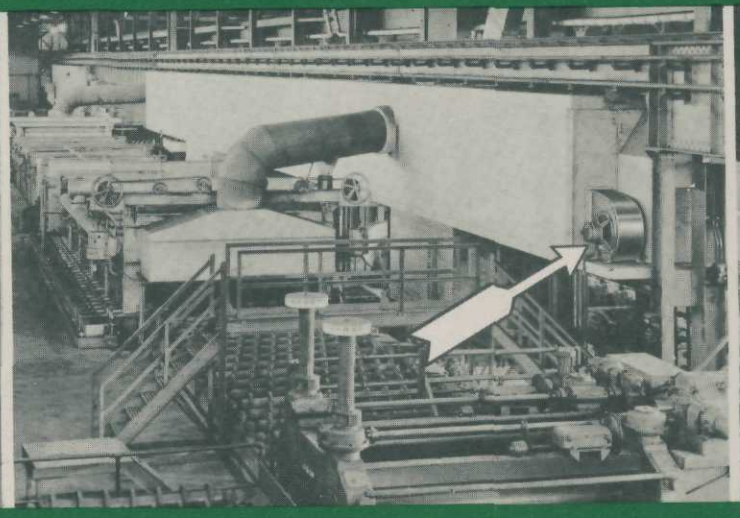
ENGRAVING SHOP



DAIRY

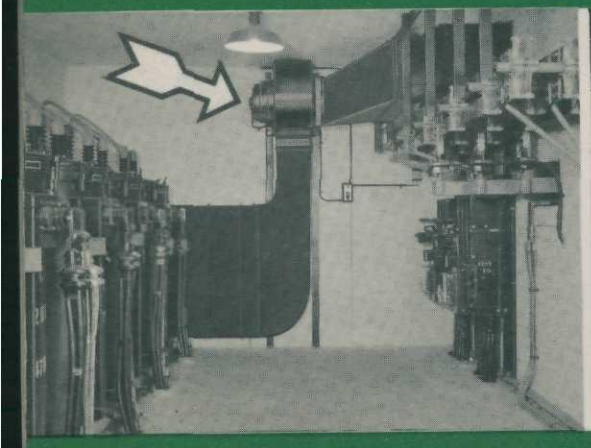


GENERATING PLANT

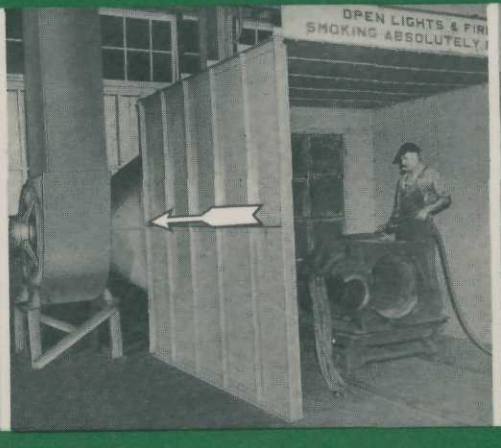


STEEL MILL

GARAGE



TRANSFORMER VAULT



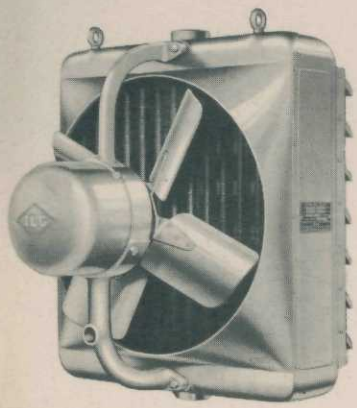
RAILROAD SHOP

RESTAURANT

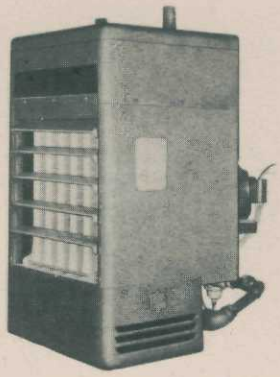
CALL NEARBY BRANCH OFFICE FOR DATA

ON THESE ILG PRODUCTS

BRANCH OFFICES IN MORE THAN 40 PRINCIPAL CITIES—CONSULT CLASSIFIED DIRECTORY

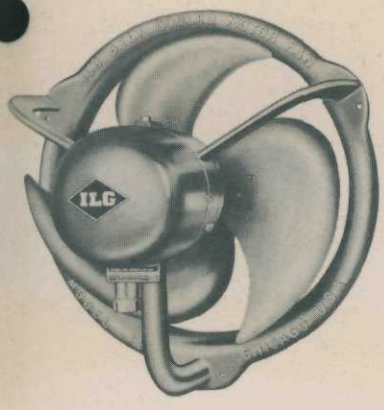


VITAL ZONE UNIT HEATERS
For steam and hot water—
four types

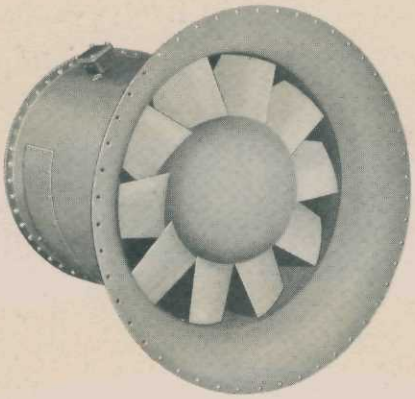


GAS-FIRED UNIT HEATERS

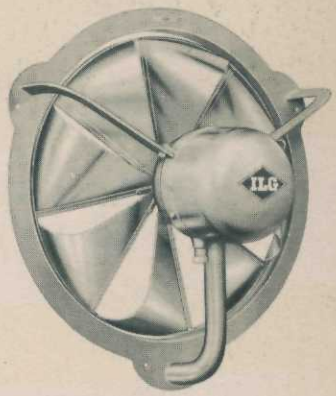
ELECTRIC UNIT HEATERS



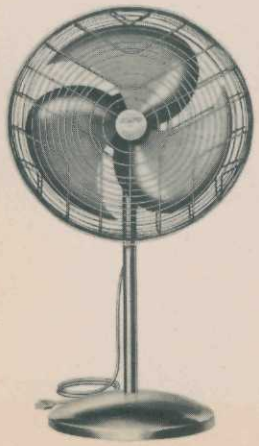
SELF-COOLED MOTOR
PROPELLER FANS—TYPE "Q"



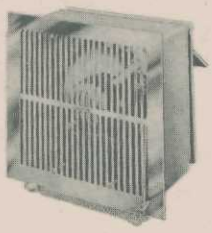
VANEAXIAL FANS



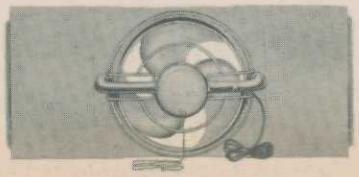
SELF-COOLED MOTOR
PROPELLER FANS—TYPE "W"



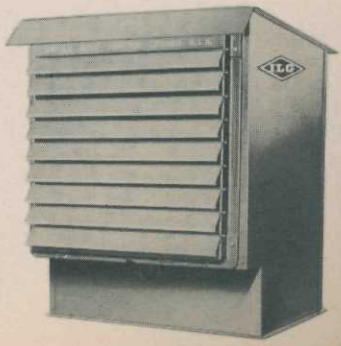
PORTABLE NIGHT
COOLING FANS



"BUILT-IN" WALL MODEL



ELECTRIC VENTILATORS FOR
KITCHENS, BATH, LAUNDRY
AND RECREATION ROOMS



POWER ROOF VENTILATORS

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Trade
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ILG plant in Chicago, Illinois. Here, under one roof, are made the propeller fans, centrifugal fans, and unit heaters for which ILG assumes a "ONE-NAME-PLATE" responsibility. Modern in every respect, with latest facilities for quality manufacture, the building is a symbol for the finest in heating and ventilating equipment.

ILG VENTILATION

ILG GUARANTEE "The ILG Electric Ventilating Company guarantees its products to be free of original defects in material or workmanship for a period of one (1) year from date of shipment from the factory or from distributors' stock. ILG will repair or replace at its option, f. o. b. factory, any part or parts which upon inspection at its factory are found to be defective within this period. Said defective part or parts are to be returned to ILG, all transportation charges prepaid. ILG shall not be held responsible for any charges involved in the removal or replacement of material at the place of operation or for consequential damages arising out of any failure."

ILG ELECTRIC VENTILATING CO.
2850 NORTH CRAWFORD AVENUE, CHICAGO 41, ILLINOIS
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